BN68-00711A-00esa_E_cover 2004.4.30 2:51 PM Page 3

PLASMA DISPLAY

Owner's Instructions

PDP4294LV

This device is a Class B digital apparatus.

Warning! Important Safety Instructions

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.

This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

Note to CATV system installer: This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I), that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Caution: FCC/CSA regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.

Caution: To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.

Attention: pour eviter les chocs electriques, introduire la lame le plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

Important: One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws.
Certain Canadian programs may also be copyrighted and any unauthorized recording in whole or in part may be in violation of these rights.

TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Thank You for Choosing ESA

Thank you for choosing ESA! Your new ESA product represents the latest in television technology. We designed it with easy-to-use on-screen menus and closed captioning capabilities, making it one of the best products in its class. We are proud to offer you a product that will provide convenient, dependable service and enjoyment for years to come.

Important Safety Information

Always be careful when using your PDP. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

- Read all safety and operating instructions before operating your PDP.
- Keep the safety and operating instructions for future reference.
- Heed all warnings on the PDP and in the operating instructions.
- Follow all operating and use instructions.
- Unplug the PDP from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.
- Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
- Do not use the PDP where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
- Do not place the PDP on an unstable cart, stand, tripod, bracket, table, or floor where it can fall. A falling PDP can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the PDP. Follow the manufacturer's instructions when mounting the unit, and use a mounting accessory recommended by the manufacturer. Move the PDP and cart with care. Quick stops, excessive force, and uneven surfaces can make the unit and cart unsteady and likely to overturn.

- Provide ventilation for the PDP. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the PDP on a bed, sofa, rug, or other similar surface. Do not place it near a radiator or heat register. If you place the PDP on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
- Operate your PDP only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this PDP is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.

- Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

- Unplug the PDP from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.

- Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.

- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.

- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the PDP.

- Ground outdoor antennas. If an outside antenna or cable system is connected to the PDP, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

- Do not attempt to service the PDP yourself. Refer all servicing to qualified service personnel. Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - when the power-supply cord or plug is damaged
  - if liquid has been spilled on the unit or if objects have fallen into the unit
  - if the PDP has been exposed to rain or water
  - if the PDP does not operate normally by following the operating instructions
  - if the PDP has been dropped or the cabinet has been damaged
  - when the PDP exhibits a distinct change in performance

- If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the PDP to normal.

- When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.

- Upon completion of any service or repairs to this PDP, ask the service technician to perform safety checks to determine that the PDP is in a safe operating condition.

- The PDP can properly operate in a temperature range of 32~104°F(0~40°C) and 80% humidity. Do not use in a hot and humid place.

- Before moving the PDP equipped with speakers, separate the speakers from the PDP. If you move the PDP with the speakers attached, it may result in damage or injury.

BN68-00711A-00esa_E_1(walldel) 2004.4.30 2:52 PM Page 5

FCC Information

User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation .

If this equipment does cause harmful interference to radio or television receptions, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

User Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4 .

The party responsible for product compliance:
SAMSUNG ELECTRONICS CO., LTD
America QA Lab of Samsung
3351 Michelson Drive,
Suite #290, Irvine, CA92612 USA

Warning

User must use shielded signal interface cables to maintain FCC compliance for the product.
Provided with this monitor is a detachable power supply cord with IEC320 style terminations.
It may be suitable for connection to any UL Listed personal computer with similar configuration.
Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating.
For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6015P type (tandem blades) plug cap.

IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Notice de Conformité IC

Cet appareil numérique de classe B respecte toutes les exigences du Règlement sur les équipements produisant des interférences au Canada.

VCCI

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI).
If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numéique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause unesired operation.

This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.

BN68-00711A-00esa_E_1(walldel) 2004.4.30 2:52 PM Page 6

Important Warranty Information Regarding Television Format Viewing

Wide screen format PDP Displays (16:9,the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format,or expanded to fill the screen if your model offers this feature, and constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on non-expanded standard format television video and programming, should be limited to no more than 5% of the total television viewing per week.

Additionally, viewing other stationary images and text such as stock market reports, video game displays,station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. ***Displaying stationary images that exceed the above guidelines can cause uneven aging of PDP Displays that leave subtle, but permanent burned-in ghost images in the PDP picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars.*** On PDP models that offer picture sizing features, use these controls to view different formats as a full screen picture.

Be careful in the selection and duration of television formats used for viewing. Uneven PDP aging as a result of format selection and use, as well as burned-in images, are not covered by your ESA limited warranty.

User Instructions

Screen Image retention

Do not display a still image (such as on a video game or when hooking up a PC to this PDP) on the plasma display panel for more than several minutes as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, refer to page 36 of this manual to reduce the degree of brightness and contrast of this screen when displaying a still image.

Cell Defect

The plasma display panel consists of fine cells. Although the panels are produced with more than 99.9 percent active cells, there may be some cells that do not produce light or remain lit.

Altitude

The PDP will not operate normally at altitudes above 6500 ft.

Warranty

Warranty does not cover any damage caused by image retention.

BN68-00711A-00esa_E_1(walldel) 2004.4.30 2:52 PM Page 7

Table of Contents

General Information

Your New Plasma Display Panel 10
Remote Control Buttons 12

Connections

Connecting VHF and UHF Antennas 16
Connecting Cable TV 17
Connecting Speakers 19
Connecting a VCR 20
Connecting a Camcorder 21
Connecting a DVD Player 22
Connecting a DTV Receiver 23

Operation

Turning the PDP On and Off 26
Memorizing the Channels 28
Setting Up Your Remote Control 33

Picture Control

Customizing the Picture 36
Using Automatic Picture Settings 37
Selecting the Color Tone 38
Viewing the Picture-in-Picture 39
Changing the Screen Size 45
Freezing the Picture 46

Sound Control

Customizing the Sound 48
Using Automatic Sound Settings 49
Choosing a Multi-Channel Sound (MTS)Soundtrack 50
Using the Auto Volume 51
Using Dolby Virtual 52
Using a Subwoofer 53

Channel Control

Fine Tuning Channels 56
LNA (Low Noise Amplifier) 57

Connecting a PC and Operation

Connecting to a PC 60
Adjusting the PC Screen 64
Changing the Position of the Image 65
Changing the Size of the Image 66
Information 67
Picture Quality Adjustment 68

Time Setting

Setting the Clock 72
Setting the Sleep Timer 73
Setting the Timers 74
Setting the Preferred Channel and Volume Level 76

Function Description

Selecting a Menu Language 78
Viewing Closed Captions 79
Digital Noise Reduction 80
Setting Auto Power Off 81
Using the V-Chip 82
Selecting the Film Mode 88

Appendix

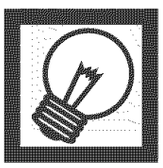
Troubleshooting 90
Care and Maintenance 91
Specifications 92

BN68-00711A-00esa_E_1(walldel) 2004.4.30 2:52 PM Page 8

BN68-00711A-00esa_E_1(walldel) 2004.4.30 2:52 PM Page 9

PLASMA DISPLAY PANEL

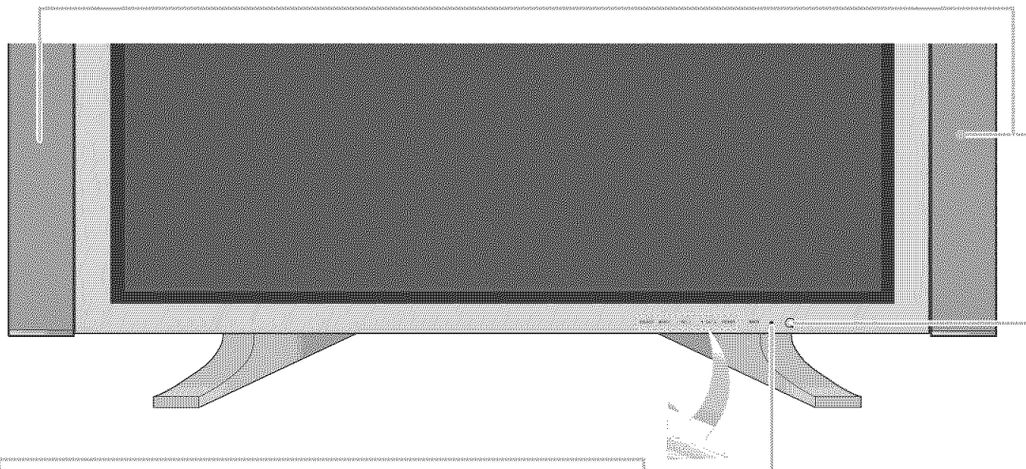
General Information



Your New Plasma Display Panel 10
Remote Control Buttons 12

Your New Plasma Display Panel

Front Panel



Speakers
(optional)

Remote Control Signal Receiver
Aim the remote control towards this spot on the PDP.

Power Indicator
Power Off : LED Red
Power On (Timer On) : LED Green
Power On (Timer Off) : LED Off

SOURCE button
Press to display all of the available video sources (ie., Video, S-Video, Component1, Component2, PC).

MENU button
Displays the main on-screen menu.

VOL(+,-) button
Press to increase or decrease the volume. Also used to select or adjust items on the on-screen menu.

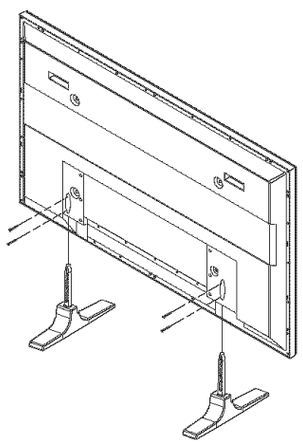
CH(▼,▲) button
Press CH▲ or CH▼ to change Channels. Also used to move up or down in the On-screen menu.

POWER button
Press to turn the PDP on and off.

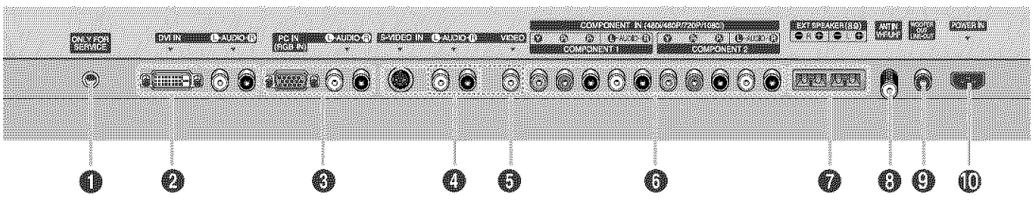
Assembling the Stand-Base

Fit the Stand-Base into the guide hole on the bottom of the monitor and tighten the left and right sides using four screws for each side.

Two or more peple should carry the PDP.
Never lay the PDP on the floor because of possible damage to the screen. Always store the PDP upright.



Rear Panel



1 Service jack
For service only.

2 DVI Input jacks
Receives the digital video/audio signals from a set top box or PC.

3 PC (RGB) Input jacks (15pin)
Connect to the video/audio output jacks on your PC.

4 S-Video Input jacks
Connect S-Video/audio signals from external sources such VCRs or DVD players.

5 Video Input jacks
Connect video/audio signals from external sources such VCRs or DVD players.

6 Component Video/Audio Input jacks (Y/P_b/P_r/Audio L/Audio R)
Connect to the audio and component output jacks of a DVD player or Set-Top Box.

7 External Speaker Out jacks
Connect external speakers.

8 Antenna jack
Connect to antenna.

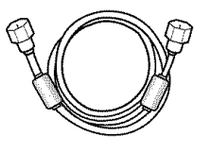
9 Sub-woofer speaker output jack
Connect to the Sub-woofer speaker jack.

10 Power Input jack
Connect the supplied power cord.

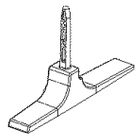
Checking Accessories

Once you have unpacked your PDP, check to make sure that you have all the parts shown here.
If any piece is missing or broken, call your dealer.

Remote Control/AAA Batteries


Antenna Cable

Speaker Cables


Stand-Base(2EA)

Power Cord

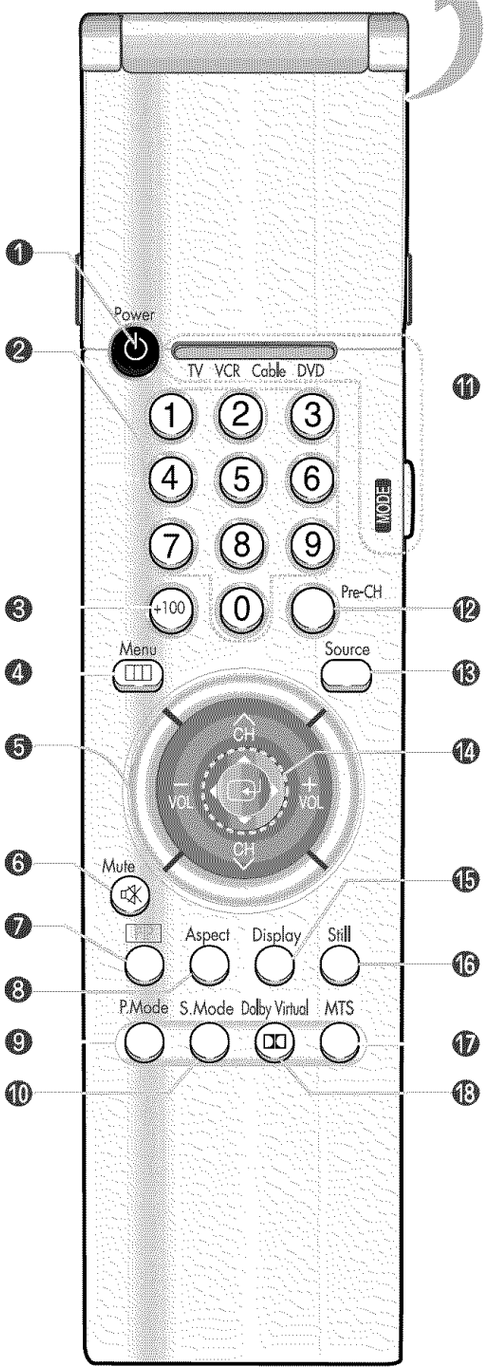
Ferrite Cores(3EA)

Screw(4EA)

Owner's Instructions

Remote Control Buttons

Remote Control



❶ Power button
Turns the PDP on and off.

❷ Number buttons

❸ +100 button
Press to select channels over 100. For example, to select channel 121, press "+100", then press "2" and "1."

❹ Menu button
Displays the main on-screen menu.

❺ CH (Channel) and VOL (Volume) buttons
Use it to switch channels or adjust volume.

❻ Mute button
Press to mute the PDP sound.

❼ PIP button
Activates picture in picture.

❽ Aspect button
Press to change the screen size.

❾ P.Mode button
Adjust the PDP picture by selecting one of the preset factory settings (or select your personal, customized picture settings.)

❿ S.Mode button
Adjust the PDP sound by selecting one of the preset factory settings (or select your personal, customized sound settings.)

⓫ Mode button
Selects a target device to be controlled by the ESA remote control (ie., VCR, Cable, or DVD players).

⓬ Pre-CH button
Tunes to the previous channel.

⓭ Source button
Press to display all of the available video sources (ie., Video, S-Video, Component1, Component2, PC, DVI).

⓮ Joystick button
Use it to move between options, select an option or adjust the On-screen menu.

⓯ Display button
Press to display information on the PDP screen.

⓰ Still button
Press to pause the current screen.

⓱ MTS button
Press to choose stereo, mono or Separate Audio Program (SAP broadcast).

⓲ Dolby Virtual button
This feature allows the TV's L/R speakers to provide a Home Theater-like Dolby effect. The center and surround sounds are mixed into the L/R speakers.

BN68-00711A-00esa_E_1(walldel) 2004.4.30 2:52 PM Page 13

⑲ Sleep button
Press to select a preset time interval for automatic shutoff.

⑳ CH.Scan button
Press to memorize (scan) the available channels.

㉑ Caption button
Controls the caption decoder.

㉒ PIP control buttons
Source : Press to select one of the available signal sources for the PIP window.

Swap : Exchanges the video signal that is currently displayed on the main screen with the signal in the PIP window.

Locate : Press to move the PIP window on the screen.

S.Swap: Press to select the audio (PIP or Main).

Size : Press to make the PIP window Large, Small or Double.

CH▲,▼: Displays the available channels in sequence. (These buttons change channels in the PIP window only).

㉓ Auto Program button
The TV automatically cycles through all of the available channels and stores them in memory.

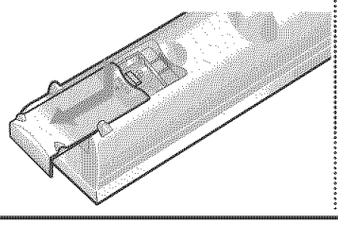
㉔ SET button
Used during setup of this remote control, so that it will work compatibly with other devices (VCR, cable box, DVD, etc.)

㉕ Add/Erase button
Press to add or erase channels in the TV's memory.

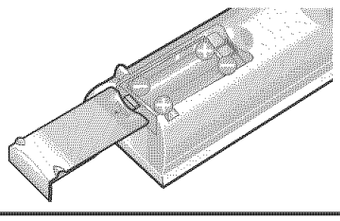
㉖ VCR, DVD control buttons
Controls VCR tape or DVD disc functions: Stop, Rewind, Play/Pause, Fast Forward.

Installing the Batteries in Your Remote Control

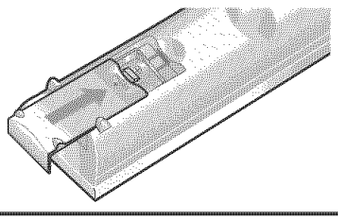
1 Slide the back cover to open the battery compartment of the remote control.



2 Install two AAA size batteries. Make sure to match the "+" and "-" ends of the batteries with the diagram inside the compartment.



3 Slide the cover back into place.

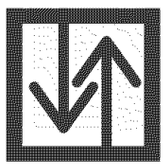


Remote Control Operation Range.
You can use your remote control within a distance of 23 feet and an angle of 30 degrees from the left and right sides of the remote control receiver of the PDP.

BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 14

BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 15

Connections



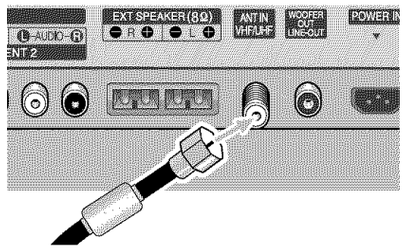
Connecting VHF and UHF Antennas 16
Connecting Cable TV.....17
Connecting Speakers.....19
Connecting a VCR.....20
Connecting a Camcorder 21
Connecting a DVD Player.....22
Connecting a DTV Receiver 23

Connecting VHF and UHF Antennas

Antennas with 75-ohm Round Leads

If your antenna looks like this: it has 75-ohm round leads.

1 Plug the antenna lead into the VHF/UHF terminal on the PDP.
Use the Antenna Cable, an accessory included in the product package.

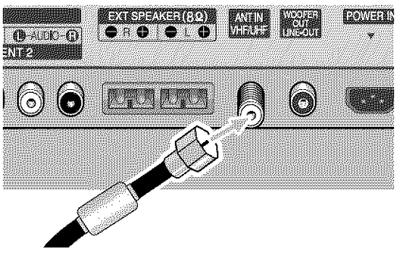


Connecting Cable TV

You can connect different cable systems to your PDP, including cable without a cable box, and cable with a cable box that descrambles some or all channels.

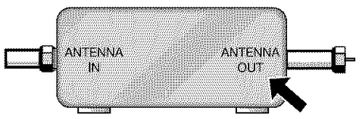
Cable without a Cable Box

1 Plug the incoming cable into the VHF/UHF terminal on the PDP.
Use the Antenna Cable, an accessory included in the product package.

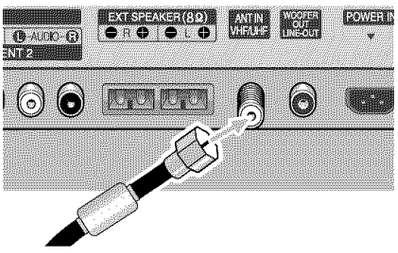


Cable with a Cable Box that Descrambles All Channels.

1 Find the cable connected to the ANTENNA OUT terminal on your cable box. This terminal might be labeled "ANT OUT", "VHF OUT", or simply "OUT".



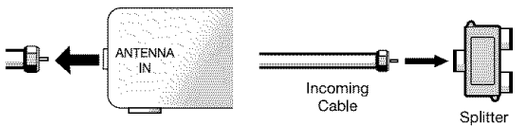
2 Connect the cable to the VHF/UHF terminal on the PDP.
Use the Antenna Cable, an accessory included in the product package.



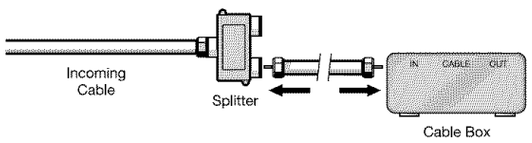
Cable with a Cable Box that Descrambles Some (But Not All) Channels

To complete this connection you will need a two-way splitter, a RF (A/B) switch, and four coaxial cables (which you can buy from your ESA dealer or any electronics store).

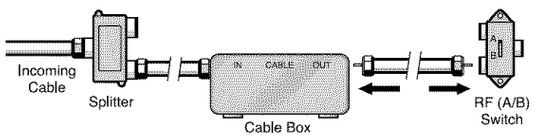
1 Find and disconnect the cable that is connected to the ANTENNA IN terminal of your cable box.
This terminal might be labeled "ANT IN", "VHF IN", or simply, "IN". Connect this cable to a two-way splitter.



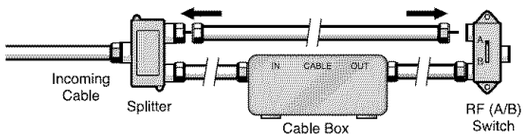
2 Connect a coaxial cable between an OUTPUT terminal of the splitter and the IN terminal of the cable box.



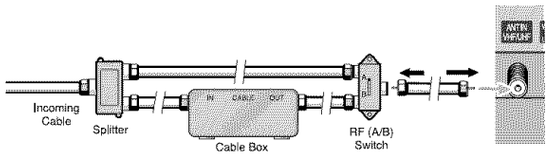
3 Connect a coaxial cable between the ANTENNA OUT terminal of the cable box and the B-IN terminal of the A/B switch.



4 Connect a coaxial cable between the ANTENNA OUT terminal of the cable box and the B-IN terminal of the A/B switch.



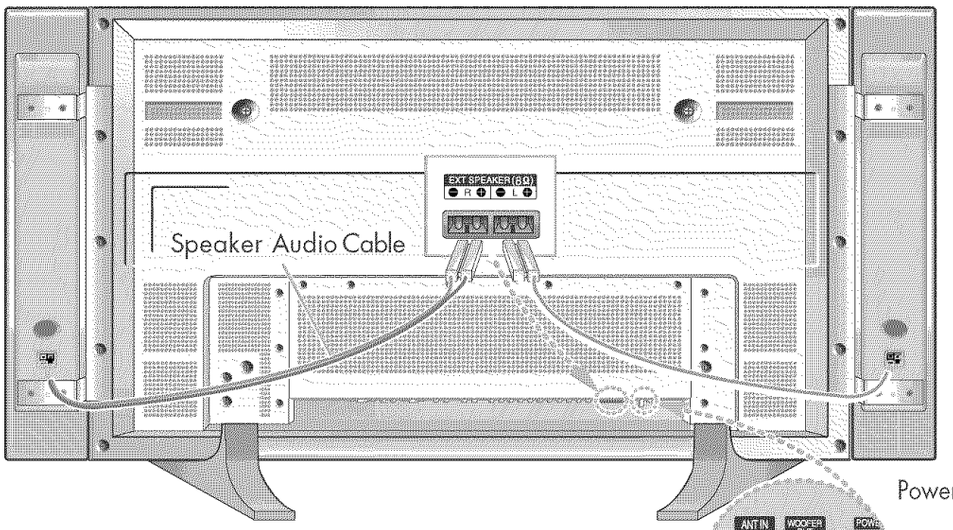
5 Connect the last coaxial cable between the OUT terminal of the RF (A/B) switch and the VHF/UHF terminal on the PDP.



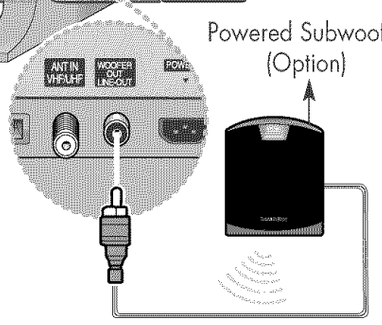
After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B", you will need to tune your Set-Top Box to the cable box's output channel, which is usually channel 3 or 4.)

Connecting Speakers

External speakers are sold seperately. Check with your dealer.



* External speakers MUST have a power handling capability of 10 watts minimum (impedance 8 ohm).



Please use the speaker-built in amplified audio.

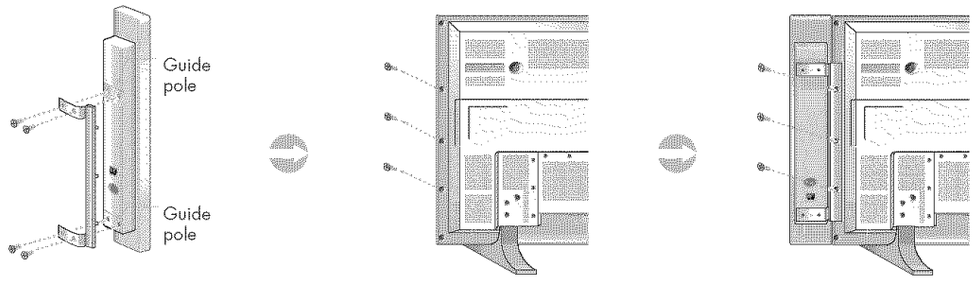
How to Connect

Connect the speaker audio cable to the external speaker output jack on the PDP matching the "+" and "-" ends of the cable with the diagram on the PDP.

Connecting PDP and Speakers

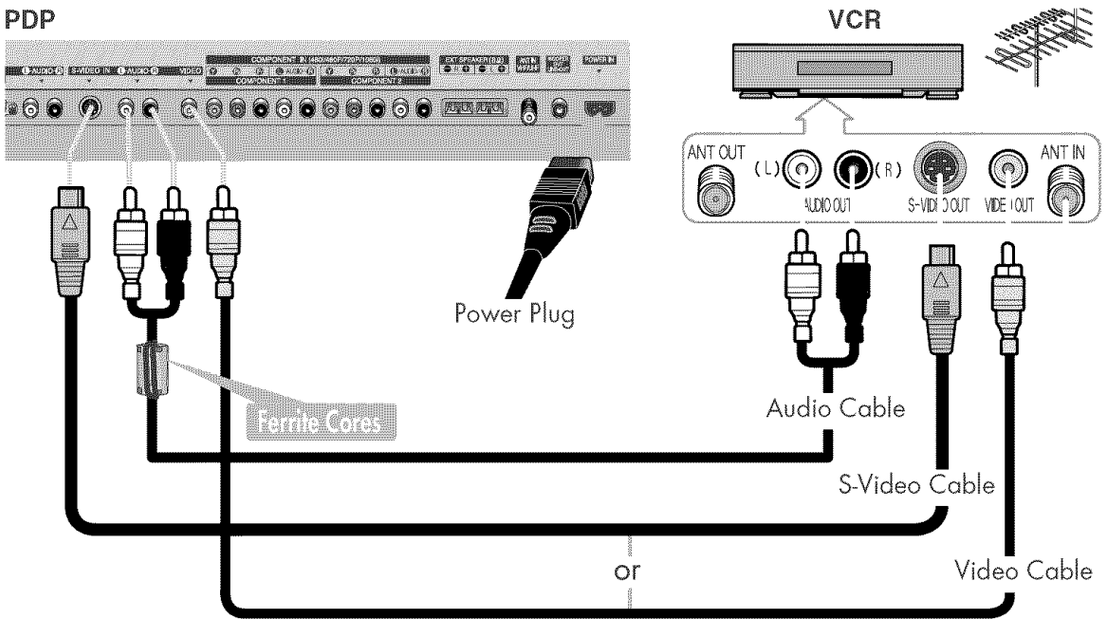
1 Fix the bracket onto the guide pole located on the rear of speaker and fasten the screws.

2 After removing the three screws on the PDP, clamp the speaker and the PDP together and fasten the screws.



Connecting a VCR

Connecting a VCR to the Video or S-Video/Audio jack



How to Connect

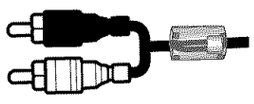
Connect the Video/Audio cables between the AUDIO(L/R)/VIDEO jacks on the PDP and AUDIO/VIDEO OUT jacks on the VCR. (Note: For better video, you can use an S-Video cable.)

Videotape Playback:

1. Turn on your PDP, and press the SOURCE button on the remote control.
2. Move the joystick up or down to select "Video" or "S-Video", then press the joystick to enter.
3. Turn on your VCR, insert a videotape and press the play button.

Ferrite Cores

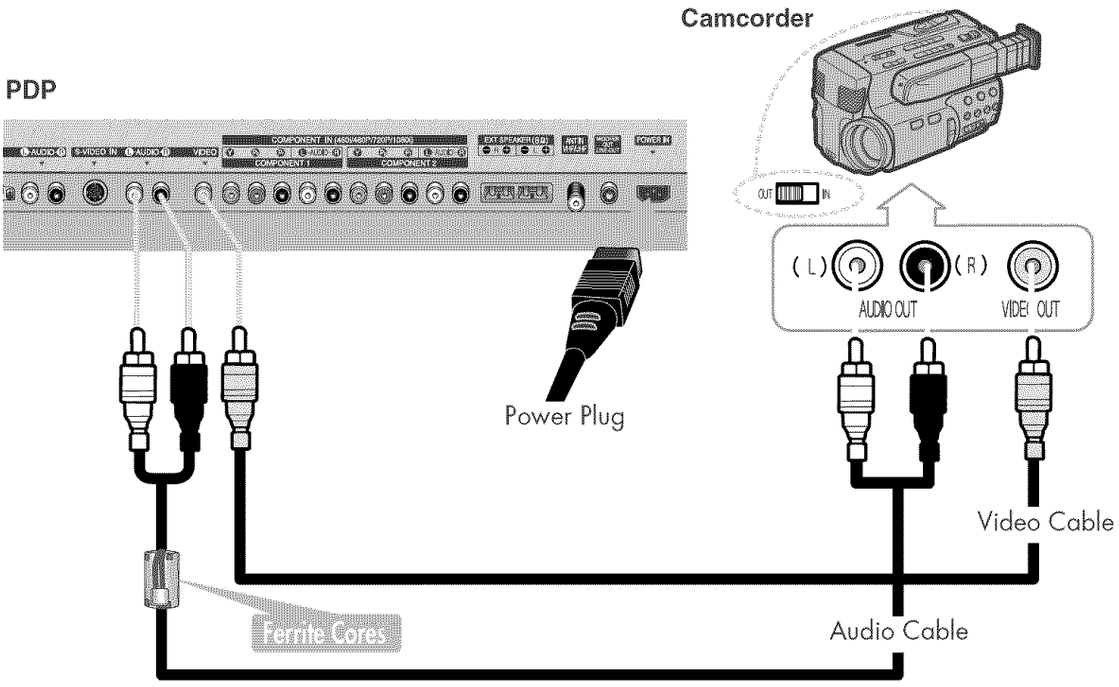
The ferrite cores are used to attenuate undesired signals. When connecting the audio cable (PC, DVI, S-Video, Video) , attach one of these ferrite cores to the cable near the connector.



When you connect the audio cable (PC, DVI, S-Video, Video) to the connectors, bind the ferrite core around the cable to secure it.

Connecting a Camcorder

Viewing camcorder tapes



How to Connect

Connect a Video/Audio cable between the AUDIO(L/R)/VIDEO jacks on the PDP and the VIDEO/AUDIO OUTPUT jacks on the camcorder.

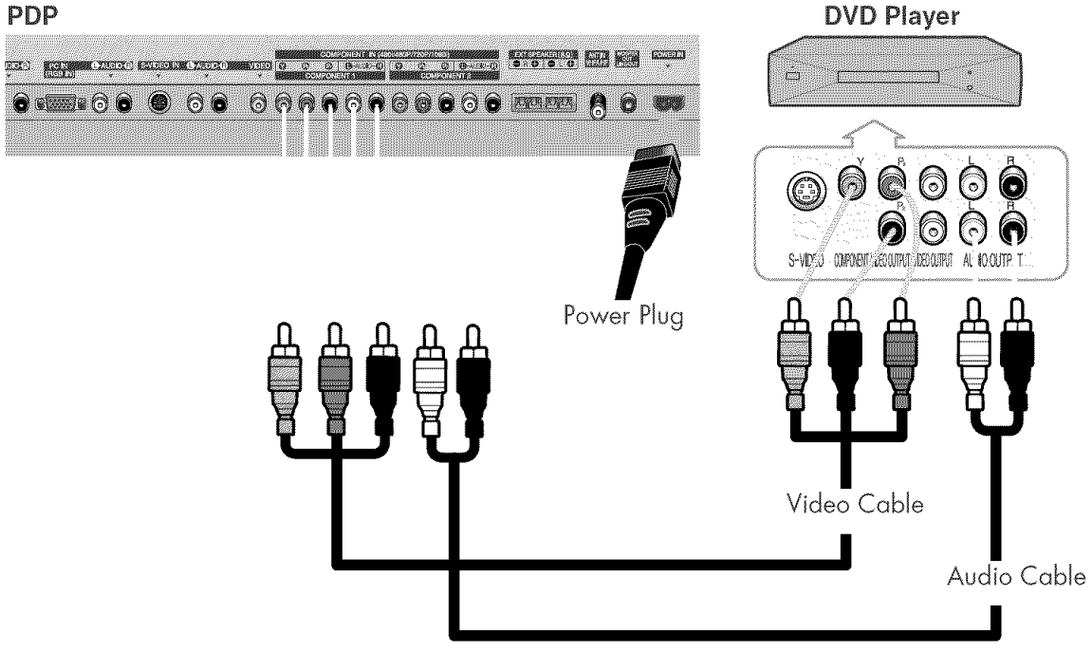
Viewing Tapes

1. Turn on your PDP, and press the SOURCE button on the remote control.
2. Move the joystick up or down to select the "Video", then press the joystick to enter.
3. Turn on your camcorder and set it to Video Mode. (For details, refer to your camcorder owner's instructions.)
4. Set the IN/OUT switch on your camcorder to OUT.
5. Insert the tape into the camcorder and press the Play button.

Connecting a DVD Player (480i, 480p)

This PDP displays the optimum picture in 720p mode.

Playing DVD



How to Connect

1. Connect a Video Cable between the Y, Pb, Pr (COMPONENT1, 2) input jacks on the PDP and Y/P_B/P_R output jacks on the DVD players.

2. Connect a Audio Cable between the AUDIO L/R(COMPONENT1, 2) input jacks on the PDP and the AUDIO OUT jacks on the DVD player.

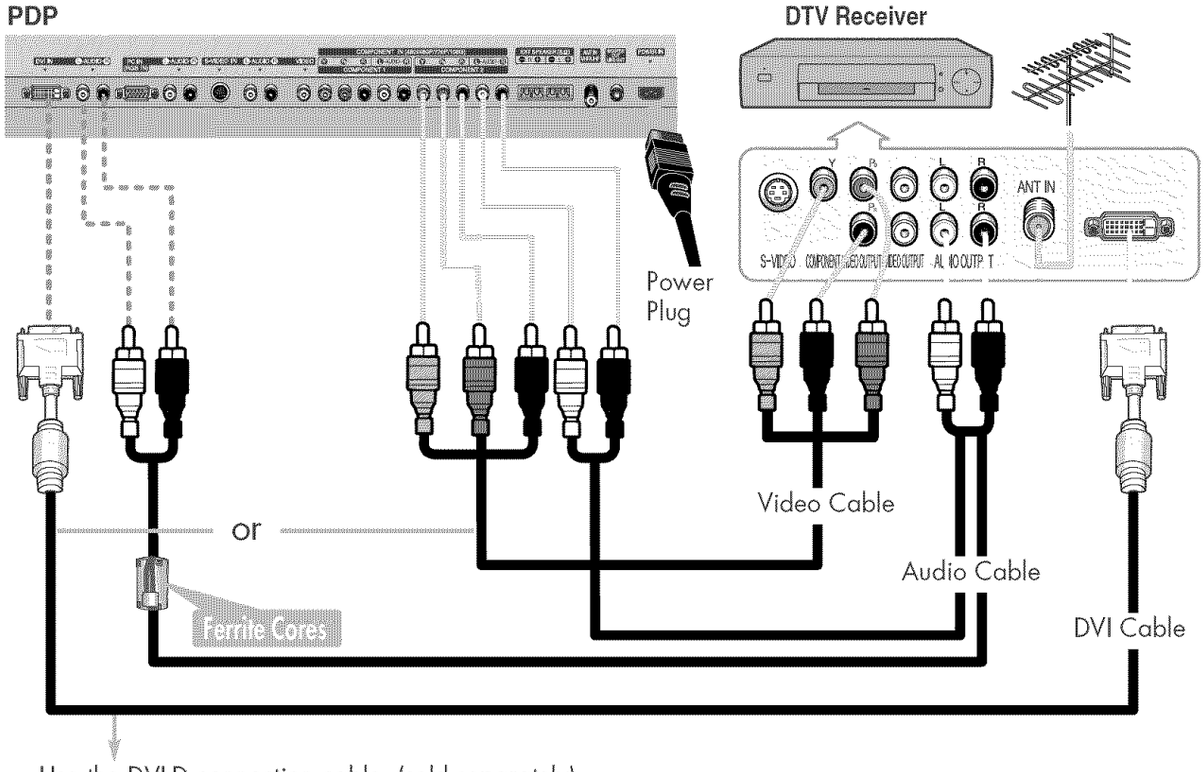
To Play DVD:

1. Turn on your PDP, and press the SOURCE button on the remote control.
2. Move the joystick up or down to select the "COMPONENT1" or "COMPONENT2", then press the joystick to enter.
3. Turn on your DVD player, insert a DVD disc and press the Play button.
   • For an explanation of Component video, see your DVD owner's instructions.

Connecting a DTV Receiver(480p, 720p, 1080i)

This PDP displays the optimum picture in 720p mode.

Watching DTV



Use the DVI-D connection cable. (sold separately)

How to Connect

1. Connect the cable or antenna to the antenna input jack on the DTV.
2. Connect a Video cable between the Y, Pb, Pr (COMPONENT 1, 2) or DVI jack on the PDP and the Y, P_B, P_R (VIDEO OUTPUT JACKS) on the DTV receiver.
3. Connect an Audio cable between the COMPONENT 1, 2 (L/R AUDIO) or DVI jacks on the PDP and the AUDIO OUTPUT jacks on the DTV.

To Watch DTV:

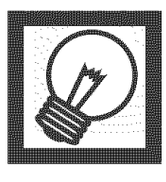
1. Turn on your PDP, and press the SOURCE button on the remote control.
2. Move the joystick up or down to select the "COMPONENT1 ", "COMPONENT2" or "DVI", then press the joystick to enter.
3. Turn on your DTV receiver.
   - For an explanation of Component video, see your DTV receiver owner's instructions.

BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 24

BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 25

PLASMA DISPLAY PANEL

Operation

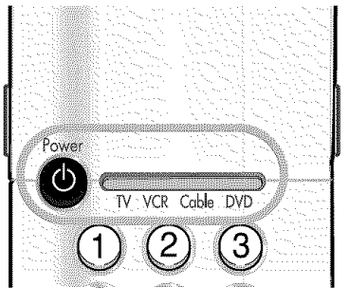


Turning the PDP On and Off 26
Memorizing the Channels.....28
Setting Up Your Remote Control 33

Turning the PDP On and Off

Turning the PDP On and Off

Press the Power button on the remote control.
The PDP will be turned on and you will be ready to use it's features.
You can also use the Power button on the front of the PDP.



Notes:

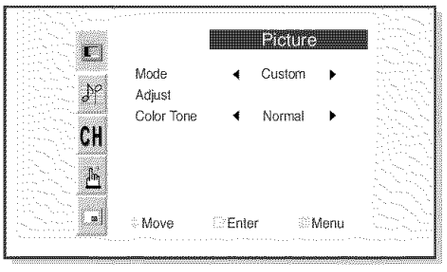
- If your PDP isn't turned on when the power button is pressed: Press the MODE button to check if the TV mode has been chosen (TV VCR Cable DVD).

Viewing the Menus and Displays

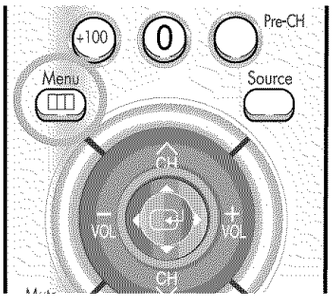
Your PDP has a simple, easy-to-use menu system that appears on the PDP screen. This system makes it convenient and fast to use features on the PDP. Your PDP also lets you display the status of many of your PDP's features.

Viewing the Menus

1 With the power on, press the Menu button on the remote control. The main menu appears on the screen. The Picture menu is selected.



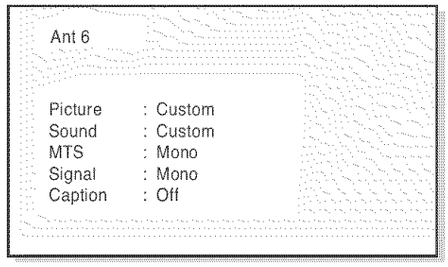
2 Use the joystick (up, down) button to move items in the menu. Use the joystick (left, right) button to display, change, or use the selected items.
Use the joystick ( ) button to enter items in the menu.
On screen menus disappear from the screen automatically after about thirty seconds, or you can press the Menu button on your remote control to exit the menu.



BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 27

Displaying Status Information

Press the Display button on the remote control. The PDP will display the Picture mode, Sound mode, MTS, Signal and Caption.



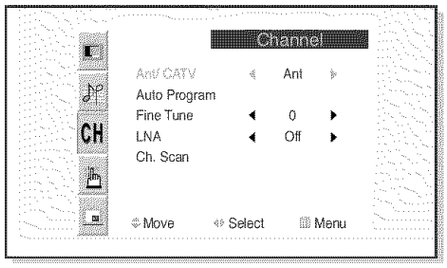
Memorizing the Channels

Your PDP can memorize and store all of the available channels for both "off-air" (antenna) and cable channels. After the available channels are memorized, use the CH ∧ and CH ∨ buttons to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding and deleting channels (manual).

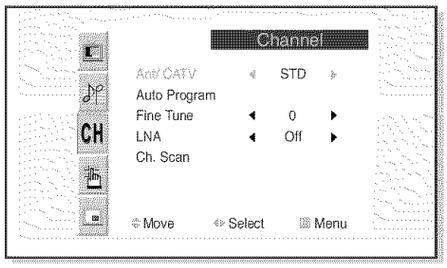
Selecting the Video Signal-source

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the PDP (i.e., an antenna or a cable system).

1 Press the Menu button. Move the joystick up or down to select "Channel", then press the joystick to enter.



2 Move the joystick left or right to select "Ant", "STD", "HRC" or "IRC".
- If you are connected to an antenna, leave "Ant" displayed. If you connected cable, move the joystick left or right to the display the type of cable system: "STD", "HRC", or "IRC". (If you are not sure which type of cable system you have, contact your cable company).



3 Press the Menu button to exit.

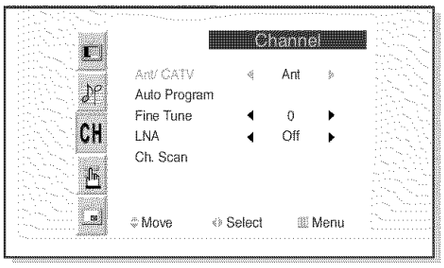
Note

- STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area.
  At this point the signal source has been selected. Proceed to "Storing Channels in Memory" (next page).

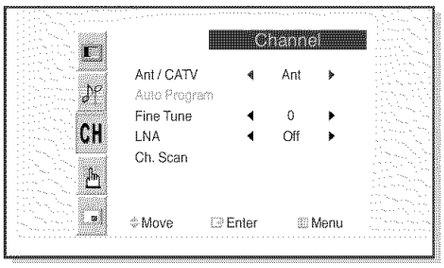
Storing Channels in Memory (Automatic Method)

1 First, select the correct signal source (Ant, STD, HRC, IRC). See steps on previous page.
Press the Menu button. Move the joystick up or down to select "Channel", then press the joystick to enter.

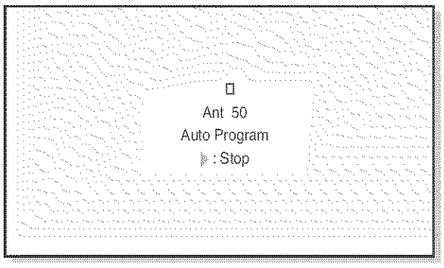
Quick way to access the Automatic Channel Setting : Just press the "Auto Program"button on the remote control.



2 Move the joystick up or down to select "Auto Program", then press the joystick to enter.



3 The PDP will begin memorizing all of the available channels.
After all the available channels are stored, the Auto program menu reappears. Move the joystick right to exit.



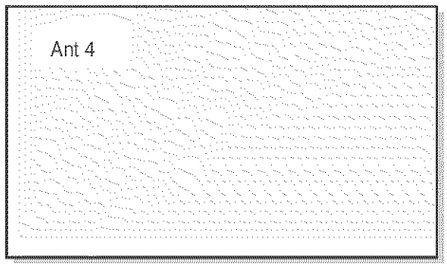
Note

- The PDP automatically cycles through all of the available channels and stores them in memory. This takes about one to two minutes.

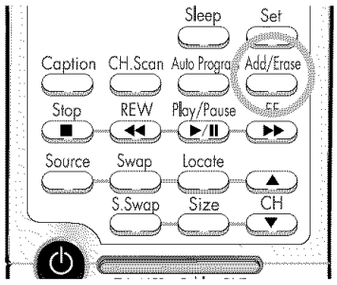
Adding and Erasing Channels (Manual Method)

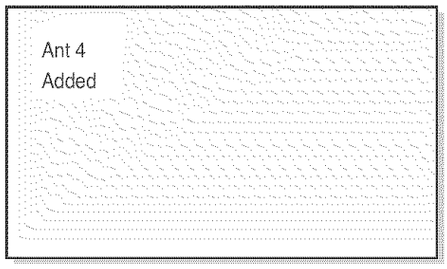
1 Use the number buttons to directly select the channel that will be added or erased.

Ex) Channel "4"



2 Press the Add/Erase button:
Repeatedly pressing this button will alternate between "Added" and "Erased."





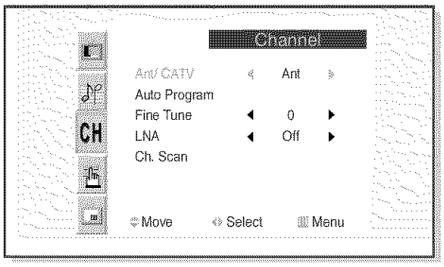
Note

- You can view any channel (including an erased channel) by using the number buttons on the remote control.

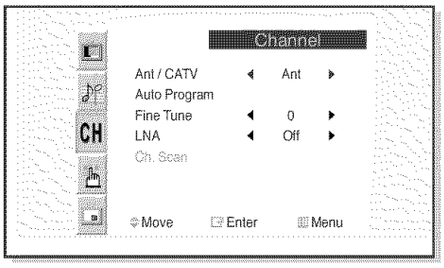
BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 31

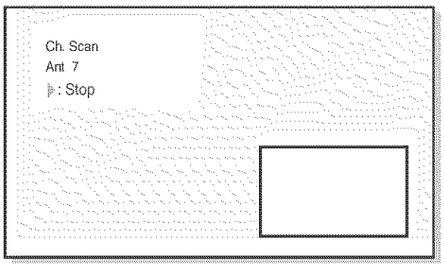
To View Memorized Channel (PIP Mode)

1 Press the Menu button. Move the joystick up or down to select "Channel", then press the joystick to enter.



2 Move the joystick up or down to select "Ch. Scan", then press the joystick to enter.
Only the memorized channels are chosen.
Move the joystick right to stop.





Changing Channels

Using the Channel Buttons

Press the CH∧ or CH∨ buttons to change channels.

When you press the CH∧ or CH∨ buttons, the PDP changes channels in sequence. You will see all the channels that the PDP has memorized. (The PDP must have memorized at least three channels.)
You will not see channels that were either erased or not memorized.

To View Memorized Channel

Press the CH.Scan button or the Channel button. Only the memorized channels are chosen.

Directly Accessing Channels

Press the number buttons to go directly to a channel. For example, to select channel 27, press "2" then "7". The TV will change channels when you press the second number.

When you use the number buttons, you can directly select channels that were either erased or not memorized. To change to single-digit channels (0~9) faster, press "0" before the single digit. (For channel "4" press "0" then "4".

Using the Pre-CH button to select the previous channel

Press the Pre-CH button. The TV will switch to the fast channel viewed.

To quickly switch between two channels that are far apart, tune to one channel, then use the number button to select the second channel. Then, use the Pre-CH button to quickly alternate between them.

Adjusting the Volume

Using the Volume Buttons

Press the VOL + or VOL – buttons to increase or decrease the volume.

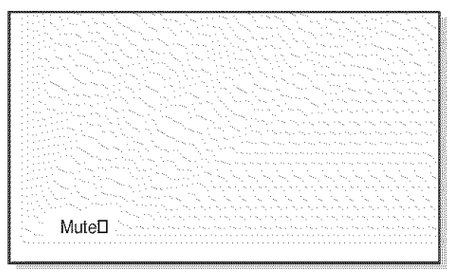
Using Mute

Using the Mute Buttons

At any time, you can temporarily cut off the sound using the Mute button.

1 Press the Mute button and the sound cuts off. The word "Mute" will appear in the lower-left corner of the screen.

2 To turn mute off, press the Mute button again, or simply press the VOL + or VOL – button.



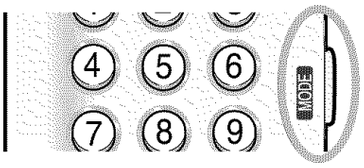
Setting Up Your Remote Control

This PDP's remote control can operate almost any VCR, cable box, or DVD. After it has been set up properly, your remote control can operate in four different modes :TV, VCR, Cable, or DVD. Pressing the corresponding button on the remote control allows you to switch between these modes, and control whichever piece of equipment you choose.

Note:The remote control may not be compatible with all DVD Players, VCRs, and Cable boxes.

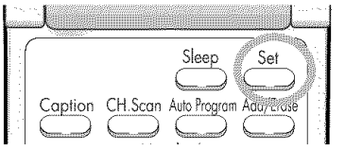
Setting Up the Remote to Operate Your VCR, Cable box, or DVD player

1 Turn off your VCR. (or Cable box, DVD player.)

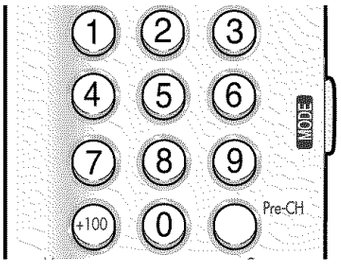


2 Press the MODE button and make sure that the VCR (or Cable box, DVD) LED is illuminated.

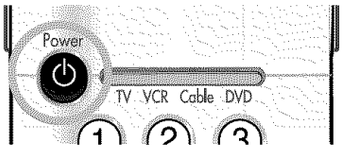
3 Press the Set button on your TV's remote control.



4 Using the number buttons on your remote control, enter three digits of the VCR (or Cable box, DVD) code listed on page 34 of this manual for your brand of VCR (or Cable box, DVD player). Make sure you enter three digits of the code, even if the first digit is a "0".
(If more than one code is listed, try the first one.)



5 Press the Power button on the remote control.
Your VCR (or Cable box, DVD player) should turn on if your remote is set up correctly. If your VCR (or Cable box, DVD player) does not turn on after set up, repeat steps 2, 3, and 4, but try one of the other codes listed for your brand of VCR (or Cable box, DVD player).
If no other codes are listed, try each code, 000 through 089 (or Cable box: 000 through 077, DVD player: 000 through 008).



Notes

- When your remote control is in "VCR" mode, the VCR control buttons (Stop, REW, Play/Pause, FF) still operate your VCR.
- When your remote control is in "Cable box" or "DVD" mode, the VCR control buttons (Stop, REW, Play/Pause, FF) still operate your VCR.

Remote Control Codes

VCR Codes

Admiral 006, 079	KLH 073	RCA 000, 005, 007, 008, 028, 035, 037, 054, 069
Aiwa 015	LG 009, 014, 046, 060	Samsung 007, 013, 022, 032, 042, 077
Akai 017, 022, 023, 027, 030	Lloyd 015	Sansui 016
Audio Dynamics 014, 016	Logik 031	Sanyo 002, 012
Bell & Howell 002	LXI 015	Scott 013, 041, 049, 068
Broksonic 010	Magnavox 008, 029, 053, 056	Sears 002, 005, 009, 012, 018, 019, 035, 043, 048
Candle 007, 009, 013, 045, 046, 052	Marantz 002, 008, 014, 016, 029, 030, 046, 061	Sharp 006, 027, 039, 045
Cannon 008, 053	Marta 009	Shintom 017, 026, 031, 055
Citizen 007, 009, 013, 045, 046, 052	MEI 008	Signature 015
Colortyme 014	Memorex 008, 009, 012, 015	Sony 017, 026, 038
Craig 007, 012	MGA 027	Sylvania 008, 015, 029, 053, 056
Curtis-Mathes 000, 007, 008, 014, 015, 046, 053, 064, 067	Midland 032	Symphonic 015
Daewoo 013, 045, 076	Minota 005, 035	Tandy 002, 015
DBX 014, 016	Mitsubishi 005, 027, 035, 040	Tashiko 009
Dimensia 000	Montgomery ward 006	Tatung 030
Dynatech 015	MTC 007, 015	Teac 015, 030, 069
Electrohome 027	Multitech 007, 015, 031, 032	Technics 008
Emerson 008, 009, 010, 013, 015, 020, 023, 027, 034, 041, 042, 047, 049, 057, 062, 065, 067, 068, 070	NEC 002, 014, 016, 030, 046, 061, 064	Ternika 008, 009, 015, 021
Fisher 002, 012, 018, 019, 043, 048, 058	Optimus 006	TMK 067
Funai 015	Panasonic 008, 053, 075, 077	Toshiba 005, 013, 019, 048, 049
GE 000, 007, 008, 032, 053	Pentax 005, 035	Totevision 007, 009
Go Video 007	Pentex Reserch+ 046	Unitech 007
Harman Kardon 014	Philco 008, 029, 053, 056	Vector Research 014, 016
Hitachi 005, 015, 035, 036	Philips 008, 029	Victor 016
Instant Replay 008	Pioneer 005, 016, 033, 050	Video Concepts 014, 016
JC Penny 002, 005, 007, 008, 014, 016, 030, 035, 051, 053	Portland 044, 045, 052	Videosonic 007
JCL 008, 002, 014, 016, 030, 046	ProScan 000	Wards 005, 006, 007, 008, 009, 012, 013, 015, 027, 031, 035
JVC 002, 014, 088, 089	Quartz 002	Yamaha 002, 014, 016, 030, 046
Kenwood 002, 014, 016, 030, 046	Quasar 008, 053	Zenith 011, 017, 026, 079
	Radio Shack/Realist 002, 006, 008, 009, 012, 015, 019, 027, 045, 053	

Cable Box Codes

Anvision 007, 008	NSC 009	Signature 046
Cablestar 007, 008	Oak 016, 038	Sprucer 027
Eagle 007, 008	Osk Sigma 016	Starcom 046
Eastern Int. 002	Panasonic 003, 027, 039, 061, 073, 074	Stargate 2000 058
General Instrument 046	Philips 007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041	Sylvania 011, 059
GI 004, 005, 015, 023, 024, 025, 030, 036, 067, 068, 069	Pioneer 018, 020, 044, 074, 077	Texscan 011, 059
Hamlin 003, 012, 013, 034, 048	Randtek 007, 008	Tocom 017, 021, 049, 050, 055, 073
Hitachi 037, 043, 046	RCA 000, 027, 066	Unika 031, 032, 041
Jerroid 004, 005, 015, 023, 024, 025, 030, 036, 046, 062, 065	Regal 003, 012, 013	Universal 051, 052
Macom 037, 043	Regency 002, 033	Viewster 007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041
Magnavox 007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041	SA 070, 071, 072	Warner Amex 044
	Samsung 044, 003, 022, 063, 064	Zenith 014, 042, 057, 061, 075, 076

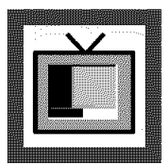
DVD Codes

Philips	001
Proscan	002
RCA	002
Toshiba	003
Panasonic	004
Sony	008
Samsung	000

BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 35

PLASMA DISPLAY PANEL

Picture Control

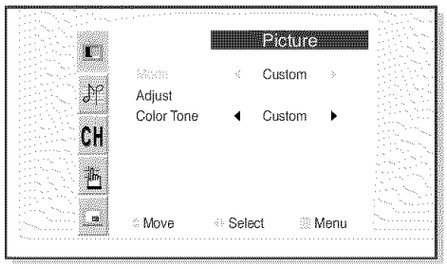


Customizing the Picture 36
Using Automatic Picture Settings 37
Selecting the Color Tone.....38
Viewing the Picture-in-Picture.....39
Changing the Screen Size 45
Freezing the Picture 46

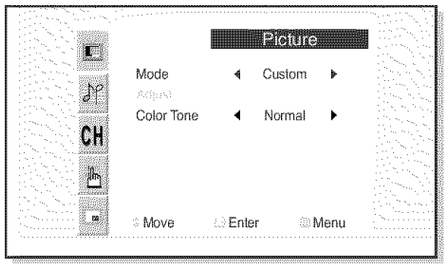
Customizing the Picture

You can use the on-screen menus to change the Contrast, Brightness, Sharpness, Color, and Tint settings of your PDP.

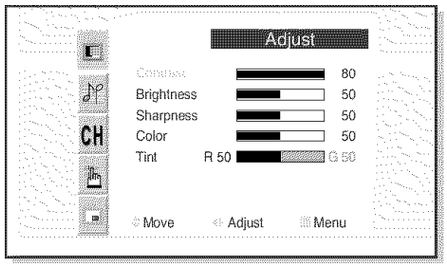
1 Press the Menu button, then press the joystick to enter.



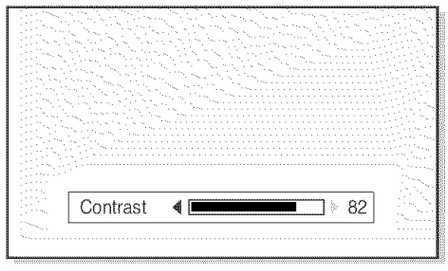
2 Move the joystick up or down to select "Adjust", then press the joystick to enter.
You will also see the items "Contrast", "Brightness", "Sharpness", "Color" and "Tint".



3 Move the joystick up or down to select the item you wish to change.



4 Move the joystick left or right to change the value of the item.



5 Press the Menu button to exit.

Note

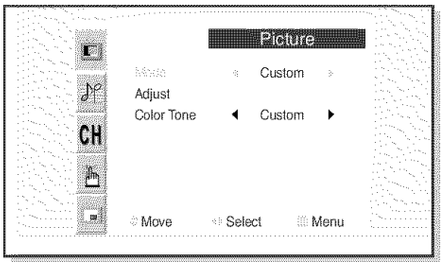
- In the PC/DVI mode, you can't adjust the "Sharpness", "Color" and "Tint".
- The Tint cannot be adjusted in Component(480p, 720p, 1080i) mode.

Using Automatic Picture Settings

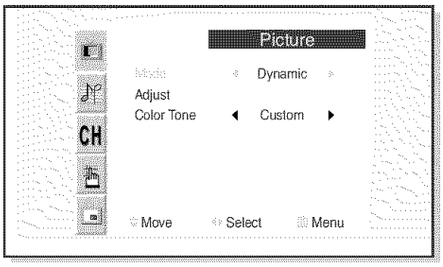
Your PDP has automatic picture settings that allow you to adjust the video display easily.

1 Press the Menu button, then press the joystick to enter.

Quick way to access the picture setting: Just press the "P.Mode" button on the remote control.



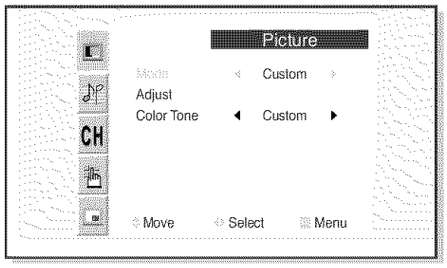
2 Move the joystick left or right to select "Custom", "Dynamic", "Standard" or "Movie" picture setting.
- You can select "High", "Middle", "Low" or "Custom" in PC/DVI mode.



3 Press the Menu button to exit.

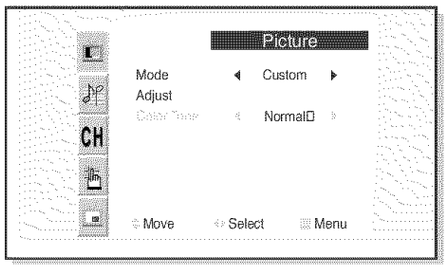
Selecting the Color Tone

1 Press the Menu button, then press the joystick to enter.



2 Move the joystick up or down to select "Color Tone", then move the joystick left or right to select "Normal", "Warm1", "Warm2", "Cool2" or "Cool1".

- You can select "Custom", "Color1", "Color2" or "Color3" in PC mode.
- You can select "Color1", "Color2" or "Color3" in DVI mode.

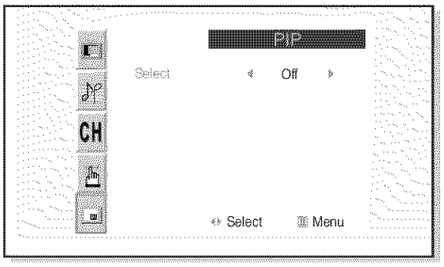


3 Press the Menu button to exit.

Viewing the Picture-in-Picture

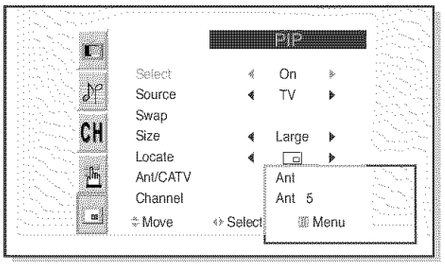
Selecting the PIP Screen

1 Press the Menu button. Move the joystick up or down to select "PIP", then press the joystick to enter.



> Quick way to access the PIP: Just press the "PIP" button on the remote control.

2 Move the joystick left or right to select "On". The PIP image will appear in the corner of the screen.



3 Press the Menu button to exit.

PIP Settings

O : PIP and Swap Operate
X : PIP doesn't Operate

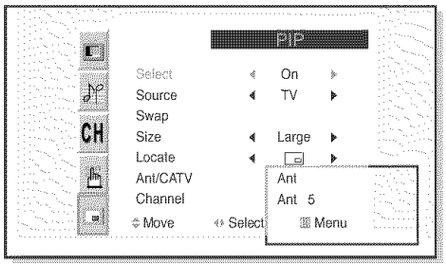
PIP screen \ Main screen	TV	Video	S-Video	Component 1	Component 2	PC	DVI
TV	O	O	O	O	O	O	O
Video	O	X	O	O	O	O	O
S-Video	O	O	X	O	O	O	O
Component 1	O	O	O	X	X	X	X
Component 2	O	O	O	X	X	X	X
PC	O	O	O	X	X	X	X
DVI	O	O	O	X	X	X	X

Selecting an External Signal

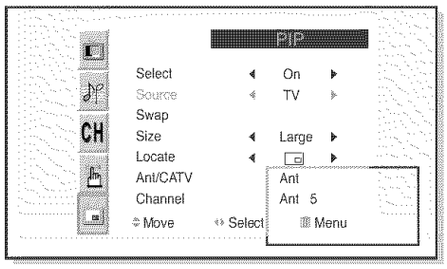
You can use PIP to view a signal from an external source, such as a VCR.

1 Press the Menu button. Move the joystick up or down to select "PIP", then press the joystick to enter.

> Quick way to access the PIP source: Just press "Source" button in the cover on the remote control.

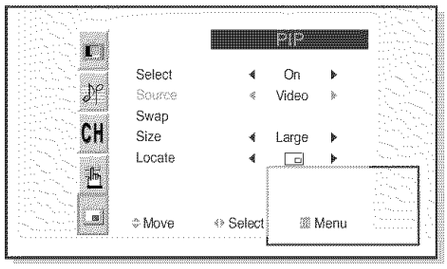


2 Move the joystick up or down to select "Source".



3 Move the joystick left or right to cycle through all of the available signal sources: "TV", "Video", "S-Video", "Component 1", "Component 2", "PC" and "DVI".

The signal from these inputs will not appear if you have not connected any equipment to the PDP's respective input.



4 Press the Menu button to exit.

Note

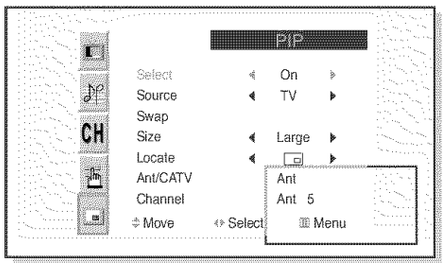
- The PIP function operates in Wide screen.
- Using Multi-Screen in the Normal, Zoom1 or Zoom2 screen will change the size of the main screen to Wide screen.

BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 41

Swapping the Contents of the PIP Image and Main Image

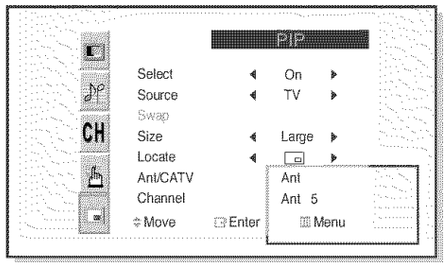
1 Press the Menu button. Move the joystick up or down to select "PIP", then press the joystick to enter.

Quick way to access swapping: Just press the "Swap" button on the remote control.



2 Move the joystick up or down to select "Swap", then press the joystick to enter.

- The image in the PIP window will appear on the main screen, and vice versa.

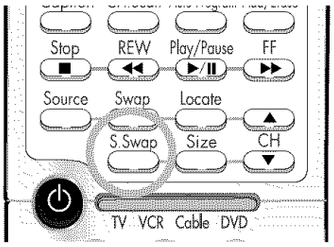


3 Press the Menu button to exit.

Selecting the Sound Source

S.Swap

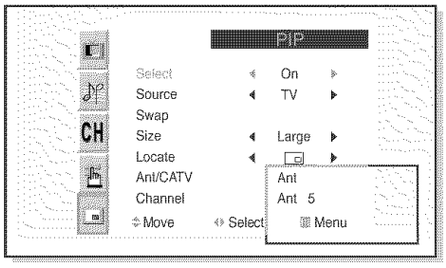
Press the S.Swap button to switch between the Main or Sub (PIP) audio source.



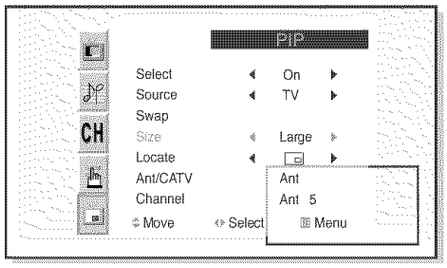
Changing the Size of the PIP Window

1 Press the Menu button. Move the joystick up or down to select "PIP", then press the joystick to enter.

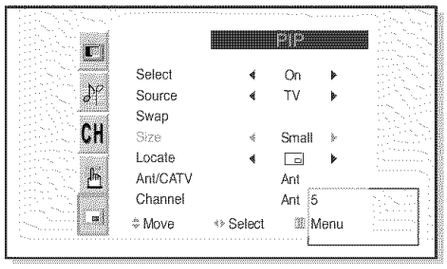
Quick way to access the PIP size: Just press the "Size" button in the cover on the remote control.



2 Move the joystick up or down to select "Size".



3 Move the joystick left or right to select "Small", "Double" or "Large".



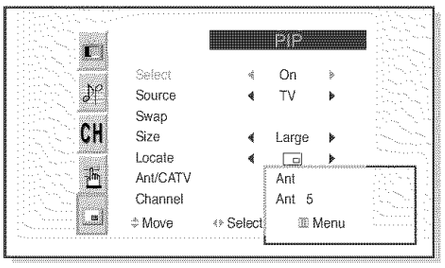
4 Press the Menu button to exit.

BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 43

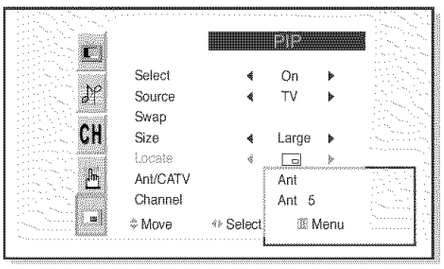
Changing the Location of the PIP Image

1 Press the Menu button. Move the joystick up or down to select "PIP", then press the joystick to enter.

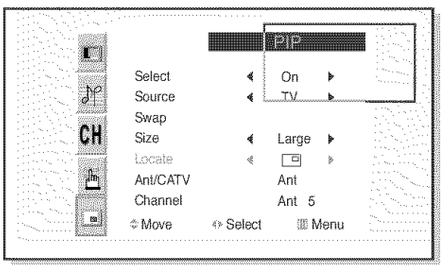
Quick way to access the PIP location: Just press the "Locate" button on the remote control.



2 Move the joystick up or down to select "Locate".



3 Move the joystick left or right to move the PIP screen where you want.

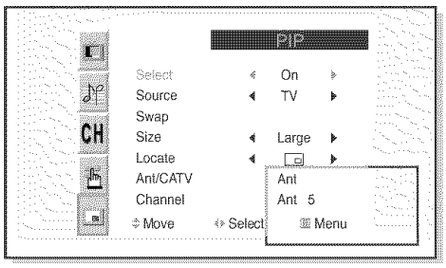


4 Press the Menu button to exit.

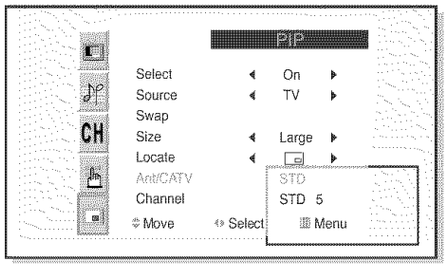
Changing the PIP Channel

1 Press the Menu button. Move the joystick up or down to select "PIP", then press the joystick to enter.

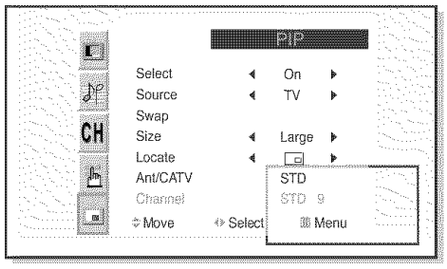
Quick way to change the PIP channel: Just press the "CH▲,▼" buttons under the cover of the remote control.



2 Move the joystick up or down to select "Ant/CATV". Move the joystick left or right to select "Ant", "STD", "HRC" or "IRC".



3 Move the joystick up or down to select "Channel". Move the joystick left or right to change the channel that appears in the PIP window. You can also press PIP CH▲, ▼ buttons on the remote control.



4 Press the Menu button to exit.

Changing the Screen Size

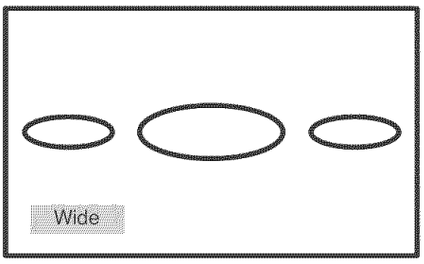
When you press the Aspect button on the remote control, the PDP's screen mode should appear in sequence. The screen displays in this order: Wide, Panorama, Zoom1, Zoom2, Normal.

Note

- If you watch a still image or the Normal (4:3) mode for a long time (over 2 hours), an image may be burned onto the screen. View the monitor in Wide or Panorama mode as much as possible.

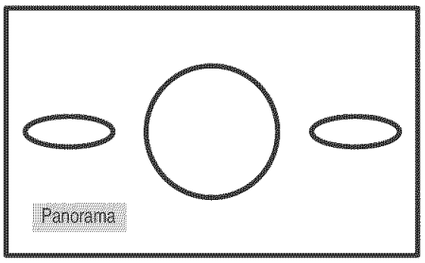
Wide

Sets the picture to 16:9 wide mode.



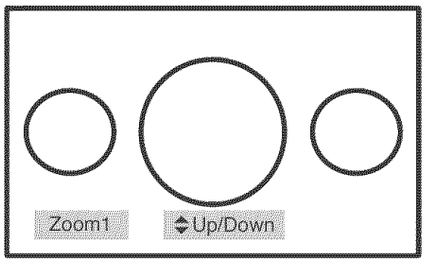
Panorama

Converts regular 4:3 aspect ratio screen to wide screen.



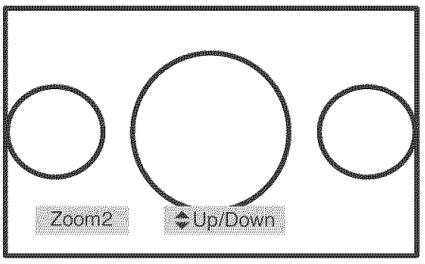
Zoom1

The screen size when Wide screen is vertically enlarged.



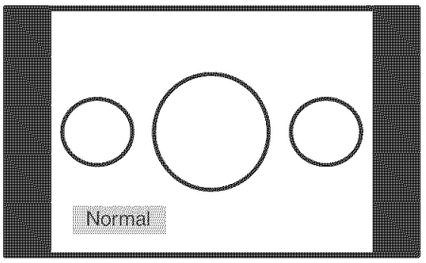
Zoom2

The screen size when the Zoom1 screen is vertically enlarged.



Normal (4:3)

Sets the picture to 4:3 normal mode.



Notes

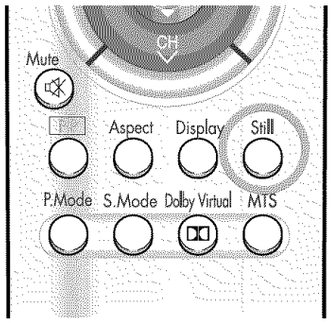
- In TV, VIDEO, S-VIDEO and Component(480i) modes, all screen modes can be selected. (Wide → Panorama → Zoom1 → Zoom2 → Normal).
- In PC/DVI mode, only Wide & Normal modes can be selected.
- In Component(480p, 720p. 1080i) modes, Panorama mode can't be selected.
- In Component(480p, 720p. 1080i) modes, you can move the picture on screen by pressing the Up▲ or Down▼ button. (All screen modes)
- Changing the screen size to Normal, Zoom1 or Zoom2 during PIP mode will cause the PIP window to disappear.

BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 46

Freezing the Picture

Still

Press the Still button on the remote control to freeze a moving picture. Press again to cancel.



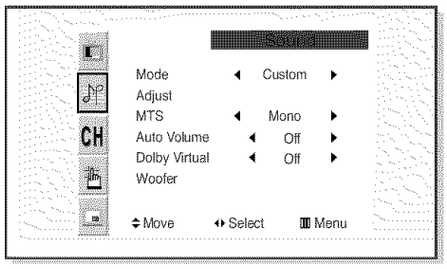
BN68-00711A-00esa_E_2(walldel) 2004.4.30 2:55 PM Page 47

Sound Control

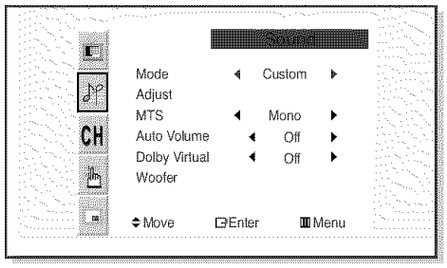
Customizing the Sound 48
Using Automatic Sound Settings 49
Choosing a Multi-Channel Sound (MTS)Soundtrack 50
Using the Auto Volume 51
Using Dolby Virtual 52
Using a Subwoofer 53

Customizing the Sound

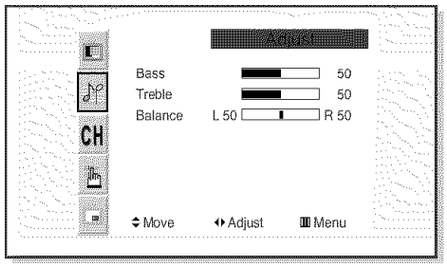
1 Press the Menu button. Move the joystick up or down to select "Sound", then press the joystick to enter.



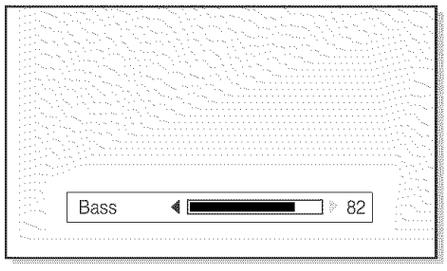
2 Move the joystick up or down to select "Adjust", then press the joystick to enter.
You will also see the items "Bass", "Treble" and "Balance".



3 Move the joystick up or down to select the item you wish to change.



4 Move the joystick left or right to change the value of the item.

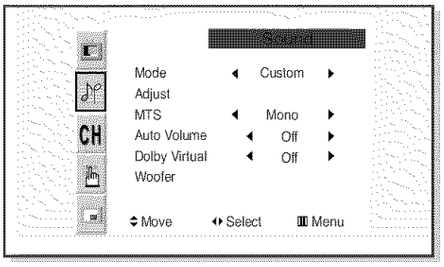


5 Press the Menu button to exit.

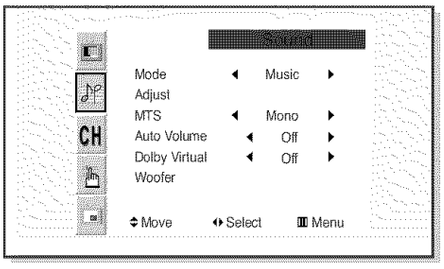
Using Automatic Sound Settings

1 Press the Menu button. Move the joystick up or down to select "Sound", then press the joystick to enter.

> Quick way to access the sound setting: Just press the "S.Mode" button on the remote control.



2 Move the joystick left or right to select "Custom", "Standard", "Music", "Movie" or "Speech" sound setting.



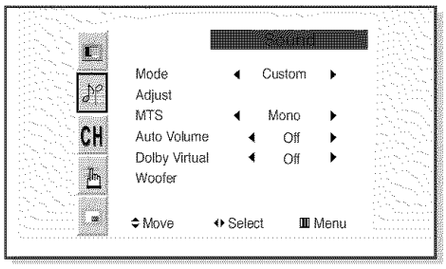
3 Press the Menu button to exit.

Choosing a Multi-Channel Sound (MTS) Soundtrack

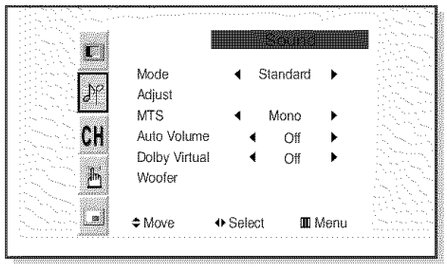
Depending on the particular program being broadcast, you can listen to stereo, mono, or a Separate Audio Program. (SAP audio is usually a foreign-language translation. Sometimes SAP has unrelated information like news or weather.)

1 Press the Menu button. Move the joystick up or down to select "Sound", then press the joystick to enter.

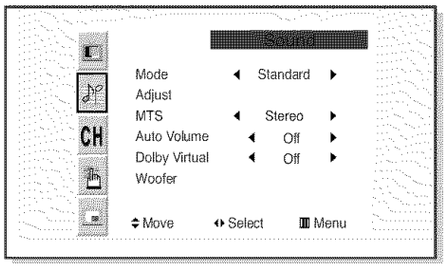
> Quick way to access the MTS menu: Just press the "MTS" button on the remote control.



2 Move the joystick up or down to select "MTS".



3 Move the joystick left or right to select "Mono", "Stereo" or "SAP".



4 Press the Menu button to exit.

- Choose *Stereo* for channels that are broadcasting in stereo.
- Choose *Mono* for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose *SAP* to listen to the Separate Audio Program, which is usually a foreign-language translation.

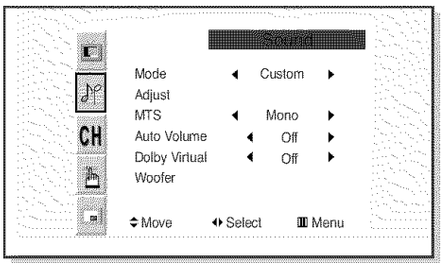
Note

- The MTS function operates in TV mode only.

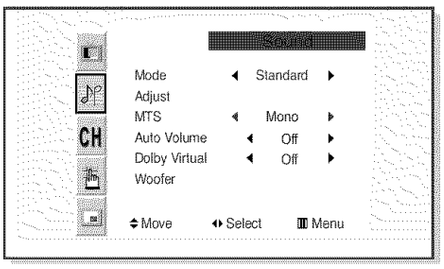
Using the Auto Volume

Each broadcasting station has its own signal conditions, which can make it necessary to adjust the volume every time the channel is changed. "Auto volume" lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

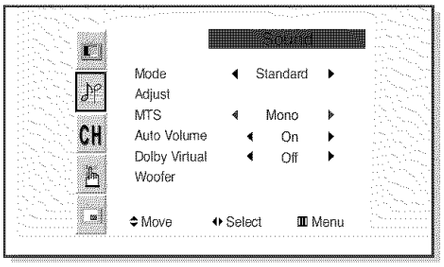
1 Press the Menu button. Move the joystick up or down to select "Sound", then press the joystick to enter.



2 Move the joystick up or down to select "Auto Volume".



3 Move the joystick right to select "On".



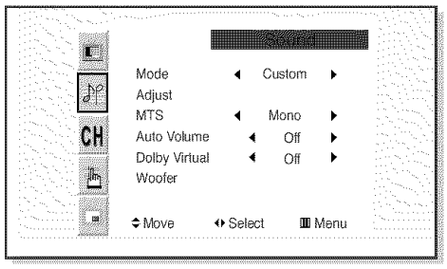
4 Press the Menu button to exit.

Using Dolby Virtual

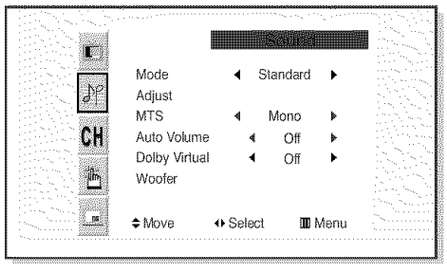
This feature allows the PDP's optional L/R speakers to provide a Home Theater-like Dolby effect. The center and surround sounds are mixed into the L/R speakers.

1 Press the Menu button. Move the joystick up or down to select "Sound", then press the joystick to enter.

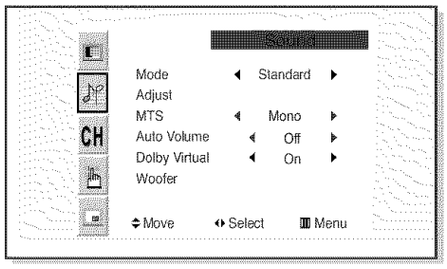
Quick way to access the Dolby Virtual: Just press the "Dolby Virtual" button on the remote control.



2 Move the joystick up or down to select "Dolby Virtual".



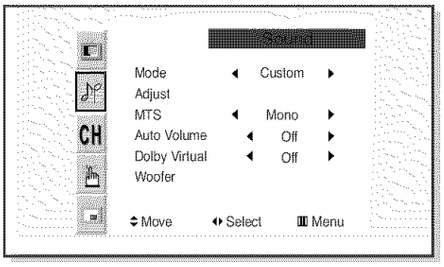
3 Move the joystick left or right to select "On".



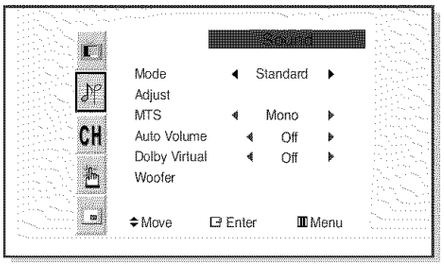
4 Press the Menu button to exit.

Using a Subwoofer

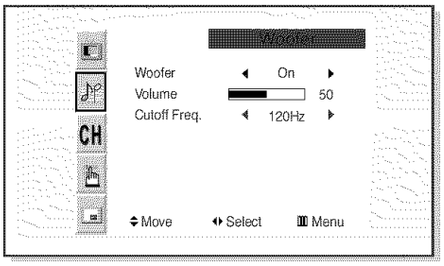
1 Press the Menu button. Move the joystick up or down to select "Sound", then press the joystick to enter.



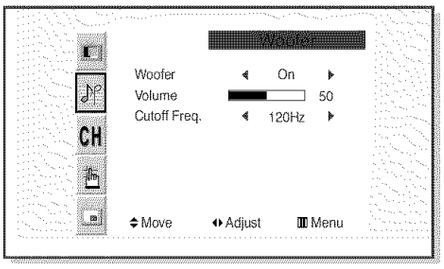
2 Move the joystick up or down to select "Woofer", then press the joystick to enter.

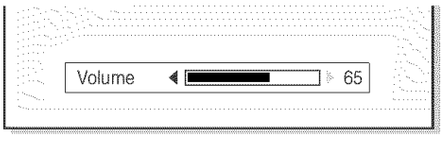


3 Move the joystick left or right to select "On".

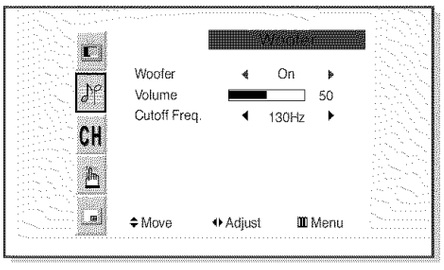


4 Move the joystick up or down to select "Volume", then move the joystick left or right to adjust the value of the item.
This sets the volume for the subwoofer.





5 Move the joystick up or down to select "Cutoff Freq.", then move the joystick left or right to adjust the value of the item.
This sets the cutoff frequency for the subwoofer.
For example, if you set the cutoff frequency at 130Hz, the subwoofer will reproduce frequencies of 130Hz and lower.



6 Press the Menu button to exit.

BN68-00711A-00esa_E_3(walldel) 2004.4.30 3:7 PM Page 54

BN68-00711A-00esa_E_3(walldel) 2004.4.30 3:7 PM Page 55

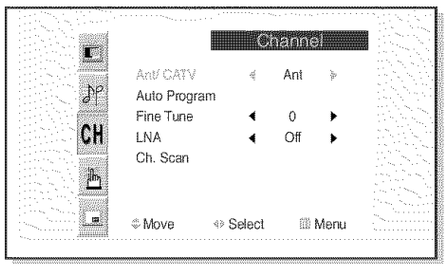
Channel Control CH

Fine Tuning Channels.....56
LNA (Low Noise Amplifier).....57

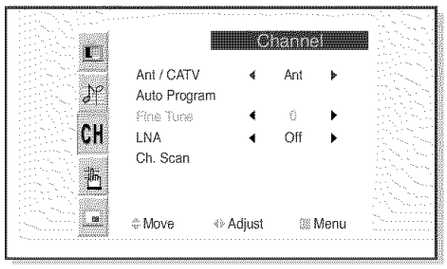
CH Fine Tuning Channels

Use fine tuning to manually adjust a particular channel for optimal reception.

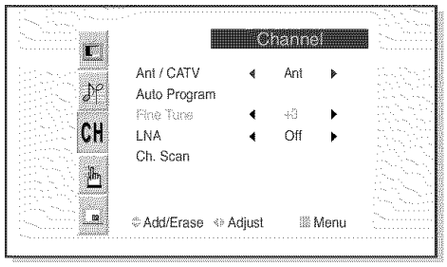
1 Press the Menu button. Move the joystick up or down to select "Channel", then press the joystick to enter.



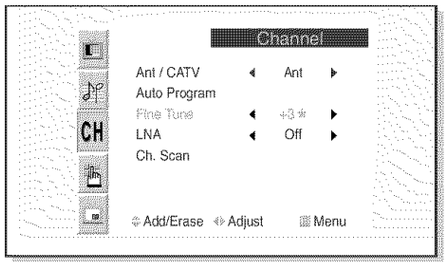
2 Move the joystick up or down to select "Fine Tune".



3 Move the joystick left or right to adjust the fine tuning.



4 To store the fine tuning setting in the TV's memory, move the joystick up. (A star icon<*>will appear.) To reset the fine tuning to "0", move the joystick down.

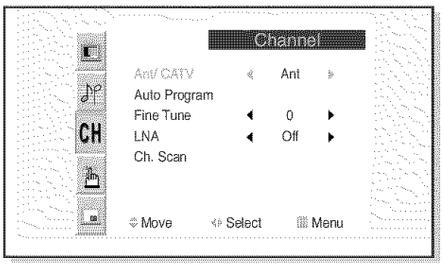


5 Press the Menu button to exit.

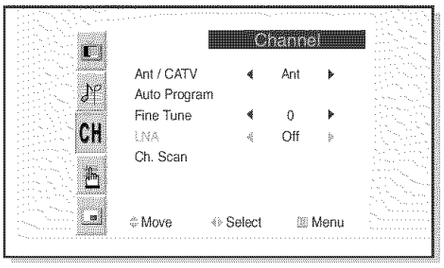
CH LNA (Low Noise Amplifier)

If the TV is operating in a weak-signal area, sometimes the LNA function can improve the reception (a low-noise preamplifier boosts the incoming signal).

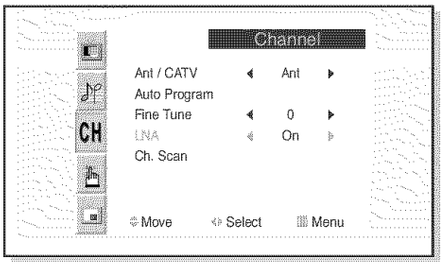
1 Press the Menu button. Move the joystick up or down to select "Channel", then press the joystick to enter.



2 Move the joystick up or down to select "LNA".



3 Move the joystick left or right to select LNA "On."
- Moving the joystick left or right will alternate between "On" and "Off."



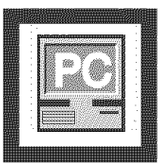
4 Press the Menu button to exit.

BN68-00711A-00esa_E_3(walldel) 2004.4.30 3:7 PM Page 58

BN68-00711A-00esa_E_3(walldel) 2004.4.30 3:7 PM Page 59

PLASMA DISPLAY PANEL

Connecting a PC and Operation

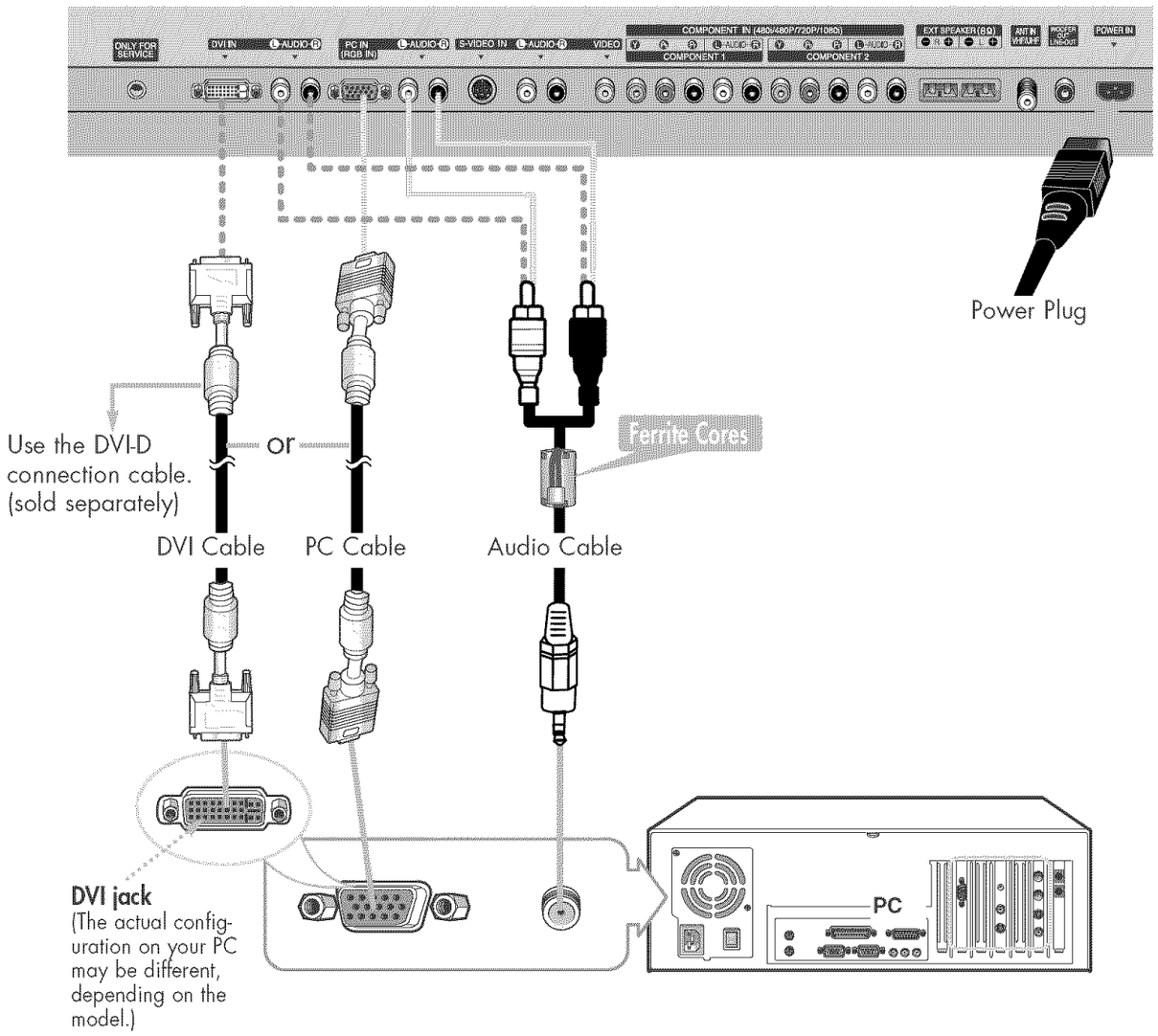


Connecting to a PC 60
Adjusting the PC Screen 64
Changing the Position of the Image 65
Changing the Size of the Image 66
Information 67
Picture Quality Adjustment 68

Connecting to a PC

Connection to a Macintosh PC may require an adaptor that fits the PC terminal.

PDP



Connecting a PC to the PDP

1 Connect a PC (15pin) cable between the Video Output jack (or DVI jack) on the PC and the RGB IN (or DVI IN) Input jack (15p D-SUB) on the PDP.

2 Connect a Audio cable between the Audio (RGB or DVI) on the PC and the Audio L/R (RGB or DVI) input jacks on the PDP.

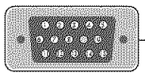
To watch the PC screen:

1. Turn on your PDP, and press the Source button on the remote control.
2. Move the joystick up or down to select "PC", then press the joystick to enter.
3. Turn on PC and check for PC system requirements. (Refer to pages 62 and 63 for PC system requirements.)
3. Adjust the PC screen. (Refer to pages 64 and 70.)

Pin Configuration

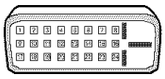
D-Sub Cable

- 15Pin Signal Cable (based on protruded pin)



Pin No.	PC IN	PC OUT
1	Red (R)	Red (R)
2	Green (G)	Green (G)
3	Blue (B)	Blue (B)
4	Grounding	Grounding
5	Grounding (DDC)	Grounding (DDC)
6	Red (R) Grounding	Red (R) Grounding
7	Green (G) Grounding	Green (G) Grounding
8	Blue (B) Grounding	Blue (B) Grounding
9	Reserved	Reserved
10	Sync Grounding	Sync Grounding
11	Grounding	Grounding
12	Data (DDC)	Data (DDC)
13	Horizontal sync.	Horizontal sync.
14	Vertical sync.	Vertical sync.
15	Clock (DDC)	Clock (DDC)

DVI-D Cable (Digital-Only Connector)



Pin No.	Signal Assignment	Pin No.	Signal Assignment
1	T.M.D.S. Data2-	13	T.M.D.S. Data3+
2	T.M.D.S. Data2+	14	+5V Power
3	T.M.D.S. Data2/4 Shield	15	Ground (for +5V)
4	T.M.D.S. Data4-	16	Hot Plug Detect
5	T.M.D.S. Data4+	17	T.M.D.S. Data0-
6	DDC Clock	18	T.M.D.S. Data0+
7	DDC Data	19	T.M.D.S. Data0/5 Shield
8	No Connect	20	T.M.D.S. Data5-
9	T.M.D.S. Data1-	21	T.M.D.S. Data5+
10	T.M.D.S. Data1+	22	T.M.D.S. Clock Shield
11	T.M.D.S. Data1/3 Shield	23	T.M.D.S. Clock+
12	T.M.D.S. Data3-	24	T.M.D.S. Clock-

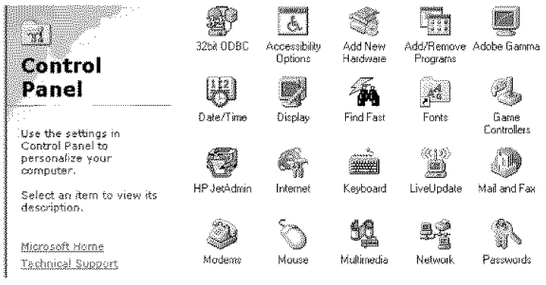
Setting up Your PDP (Plug and Play)

Our adoption of the new VESA® Plug and Play solution eliminates complicated and time consuming setup. It allows you to install your monitor in a Plug and Play compatible system, without the usual setup hassles and confusion. Your PC system can easily identify and configure itself for use with your display. This monitor automatically tells the PC system its Extended Display Identification data (EDID) using Display Data Channel (DDC) protocols.

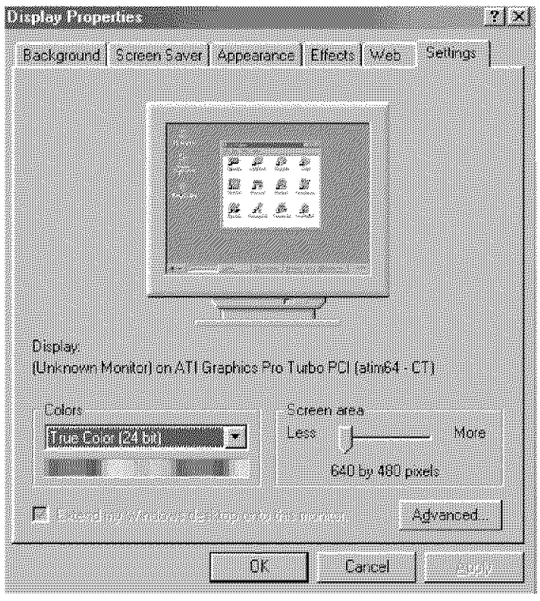
How to Set up Your PC Software (Windows only)

The Windows display-settings for a typical computer are shown below. However, the actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. But even if your actual screens look different, the same, basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or ESA Dealer.)

On the windows screen, select in the following sequence : Start → Settings → Control Panel.



When the control panel screen appears, double-click on "Display" and a display dialog-box will appear.



Select the "Settings" tab in the display dialog-box.

The two key variables that apply to the PDP-PC interface are "resolution" and "colors".
The correct settings for these two variables are:

- Size (sometimes called "resolution"): 640 x 480 pixels.
- Color: "24-bit" color (might also be expressed as "16 million colors")Shown at left is a typical screen for "Display" dialog box.

If a vertical-frequency option exists on your display settings dialog box, the correct value is "60" or "60 Hz." Otherwise, just click "OK" and exit the dialog box.

Continued...

Notes:

Both screen position and size will vary, depending on the type of PC monitor and its resolution.
The table below shows all of the display modes that are supported:

Video signal	Dot X Line	Vertical Frequency (Hz)	Horizontal Frequency (KHz)	Vertical polarity	Horizontal polarity
IBM PC / AT Compatible	640 X 350	70.086	31.469	N	P
		85.080	37.861	N	P
	640 X 400	85.080	37.861	P	N
	720 X 400	70.087	31.469	P	N
		85.039	37.927	P	N
	640 X 480	59.940	31.469	N	N
		72.809	37.861	N	N
		75.000	37.500	N	N
		85.008	43.269	N	N
	800 X 600	56.250	35.156	N/P	N/P
		60.317	37.879	P	P
		72.188	48.077	P	P
		75.000	46.875	P	P
		85.061	53.674	P	P
	1024 X 768	60.004	48.363	N	N
		70.069	56.476	N	N
		75.029	60.023	P	P
		84.997	68.677	P	P

(N: Negative / P: Positive)

- The interlace mode is not supported.
- The PDP operates abnormally if a non-standard video format is selected.

Notes:

- When this PDP is used as a PC display, 32-bit color is supported.
- Depending on the manufacturer, your PC display screen might appear different. (and depending on your particular version of Windows).
  Check your PC instruction book for information about connecting your PC to a PDP.
- If a vertical and horizontal frequency-select mode exists, select 60Hz (vertical) and 31.5kHZ (horizontal).
- In some cases, abnormal signals (such as stripes) might appear on the screen when the PC power is turned off (or if the PC is disconnected). If so, press the Source button to enter the VIDEO mode. Also, make sure that the PC is connected.
- Connect only a PC monitor to the monitor output port while viewing the PC screen. (Otherwise, random signals might appear).

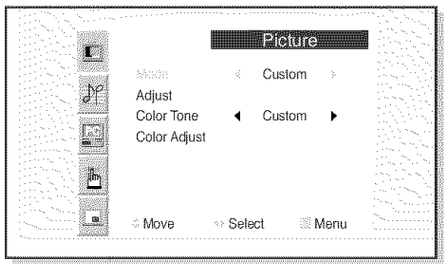
Adjusting the PC Screen

Adjusting the R.G.B

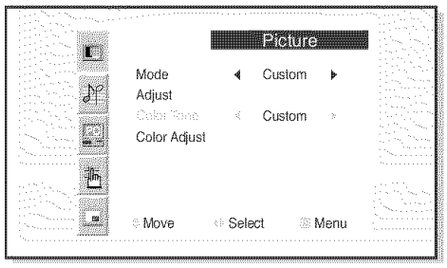
Preset:

- Press the Source button, then move the joystick up or down to select PC. Press the joystick to select PC mode.

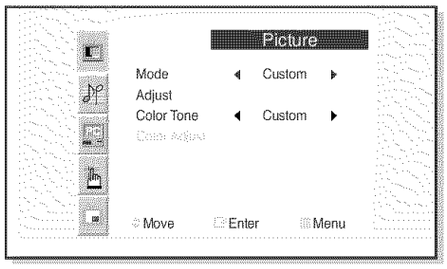
1 Press the Menu button, then press the joystick to enter.



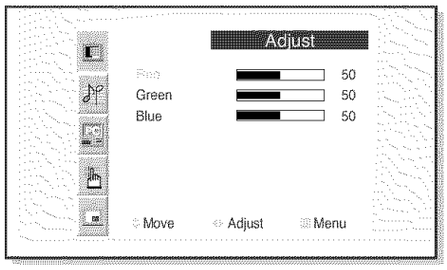
2 Move the joystick up or down to select "Color Tone", then move the joystick left or right to select "Custom". When "Custom" is selected, the word "Color Adjust" will appear on the screen.

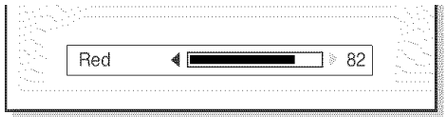


3 Move the joystick up or down to select "Color Adjust", then press the joystick to enter.



4 Move the joystick up or down to select the item you want to change, then move the joystick right or left to change the value of the item, using the on-screen gauge as your guide.





5 Press the Menu button to exit.

BN68-00711A-00esa_E_3(walldel) 2004.4.30 3:7 PM Page 65

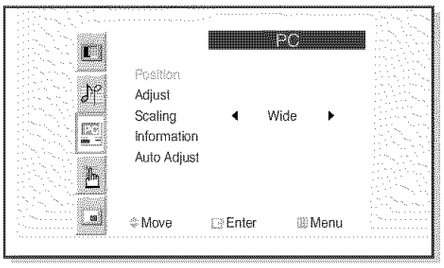
Changing the Position of the Image

After connecting the PDP to your PC, adjust the position of the screen if it is not well-aligned.

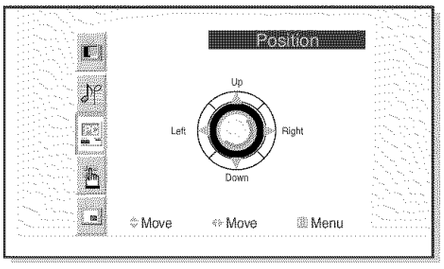
Preset:

- Press the Source button, then move the joystick up or down to select PC. Press the joystick to select PC mode.

1 Press the Menu button. Move the joystick up or down to select "PC", then press the joystick to enter.



2 Press the joystick to enter, then adjust the screen position by using the joystick button.



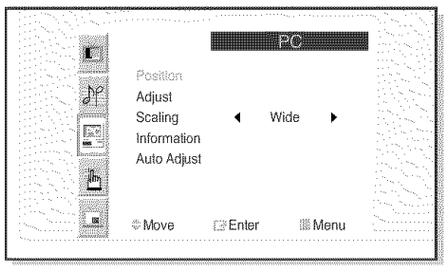
3 Press the Menu button to exit.

Changing the Size of the Image

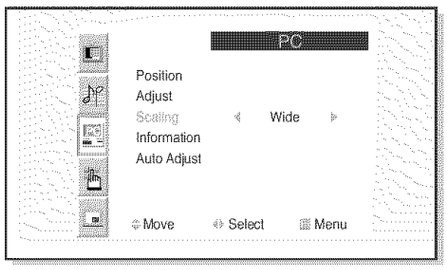
Preset:

- Press the Source button, then move the joystick up or down to select PC. Press the joystick to select PC mode.

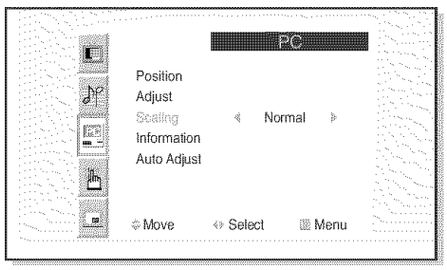
1 Press the Menu button. Move the joystick up or down to select "PC", then press the joystick to enter.



2 Move the joystick up or down to select "Scaling".



3 Move the joystick left or right to select "Wide" or "Normal".



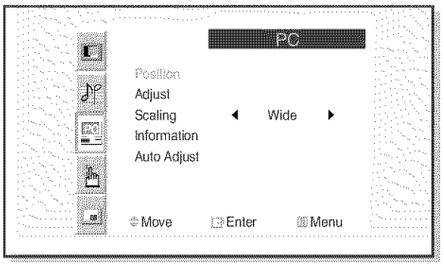
4 Press the Menu button to exit.

Information

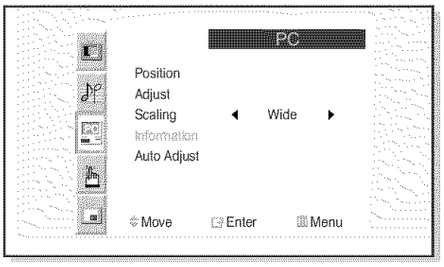
Preset:

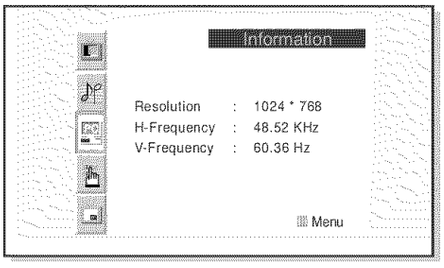
- Press the Source button, then move the joystick up or down to select PC. Press the joystick to select PC mode.

1 Press the Menu button. Move the joystick up or down to select "PC", then press the joystick to enter.



2 Move the joystick up or down to select "Information", then press the joystick to enter.
The vertical, horizontal frequencies and resolution appear.





3 Press the Menu button to exit.

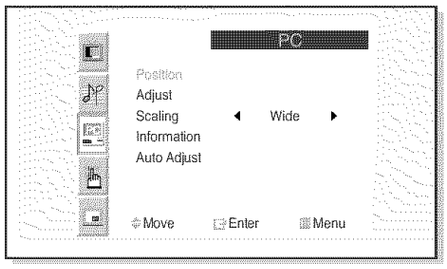
Picture Quality Adjustment

Picture Automatic Adjustment

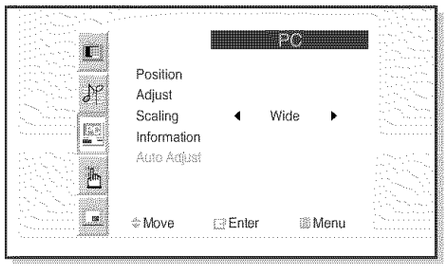
Preset:

- Press the Source button, then move the joystick up or down to select PC. Press the joystick to select PC mode.

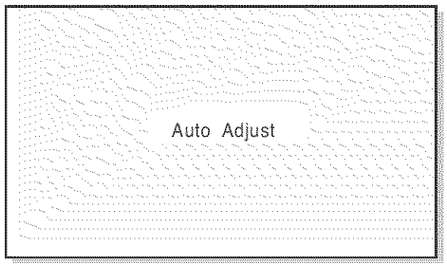
1 Press the Menu button. Move the joystick up or down to select "PC", then press the joystick to enter.



2 Move the joystick up or down to select "Auto Adjust", then move the joystick left or right to enter.



3 The message "Auto Adjust" appears on the screen and the picture adjustments are automatically activated.



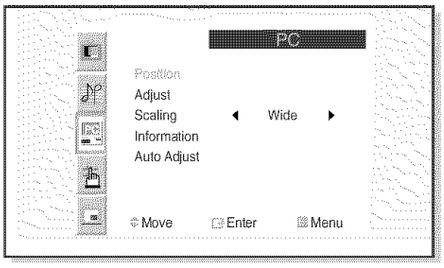
4 Press the Menu button to exit.

Coarse Adjustment

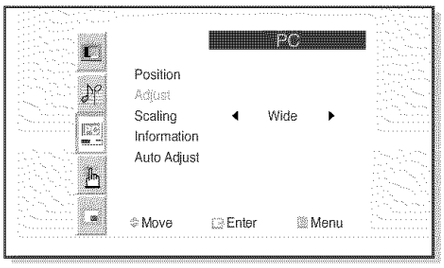
Preset:

- Press the Source button, then move the joystick up or down to select PC. Press the joystick to select PC mode.

1 Press the Menu button, move the joystick up or down to select "PC", then press the joystick to enter.

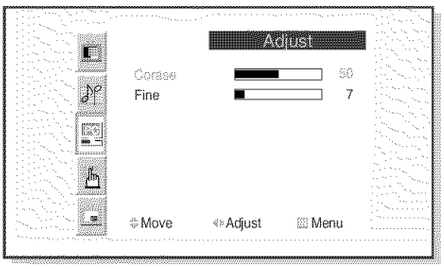


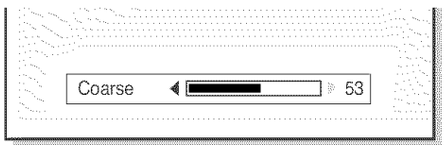
2 Move the joystick up or down to select "Adjust", then move the joystick left or right to enter.



3 Move the joystick up or down to select "Coarse".

Remove picture noise (vertical stripes) on the screen by moving the joystick left or right. (If Coarse is not set properly, vertical stripes will appear on the screen.)





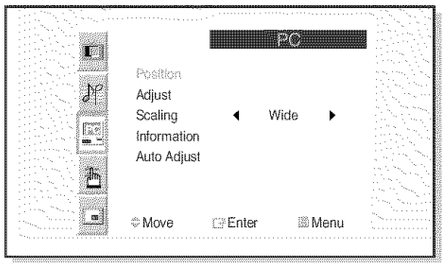
4 Move the Menu button to exit.

Fine Tuning (Fine)

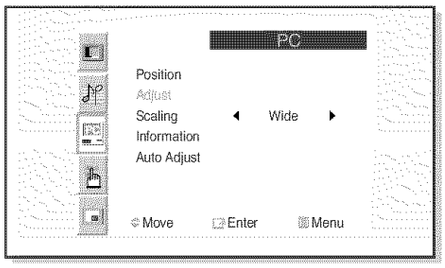
Preset:

- Press the Source button, then move the joystick up or down to select PC. Press the joystick to select PC mode.

1 Press the Menu button. Move the joystick up or down to select "PC", then press the joystick to enter.

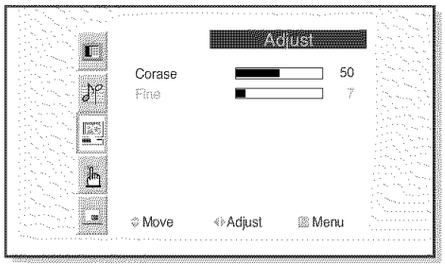


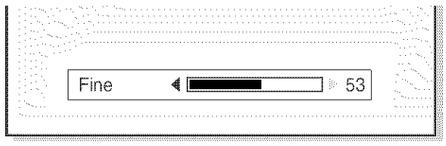
2 Move the joystick up or down to select "Adjust", then move the joystick left or right to enter.



3 Move the joystick up or down to select "Fine".

Remove picture noise (vertical stripes) on the screen by moving the joystick left or right. (If Fine is not set properly, vertical stripes will appear on the screen.)

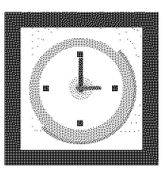




4 Move the Menu button to exit.

BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 71

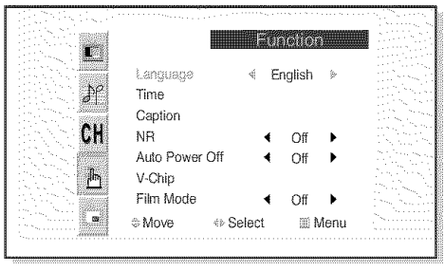
Time Setting



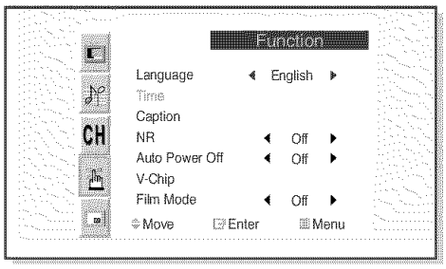
Setting the Clock 72
Setting the Sleep Timer 73
Setting the Timers 74
Setting the Preferred Channel and Volume Level 76

Setting the Clock

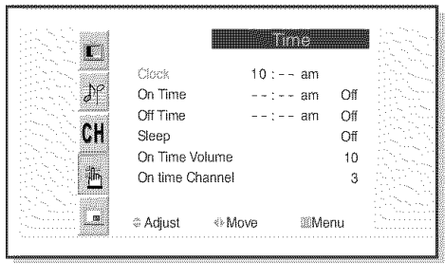
1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



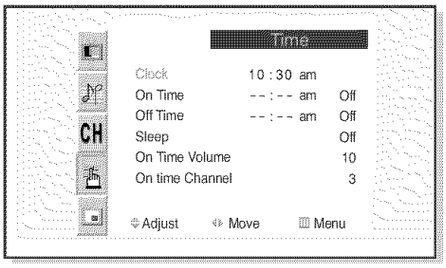
2 Move the joystick up or down to select "Time", then press the joystick to enter.



3 Move the joystick left or right to select hour, then move the joystick up or down to select the correct hour.



4 Move the joystick left or right to select minute, then move the joystick up or down to select the correct minute.



5 Press the Menu button to exit.

Note

- Time setting will be reset when you pull out the Power cord if the PDP is ON.
  (If you want to keep the time setting, turn the PDP off using the Power button on the remote control or the Front Panel.)

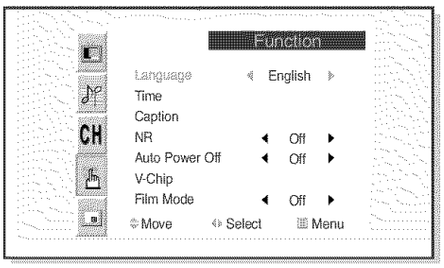
BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 73

Setting the Sleep Timer

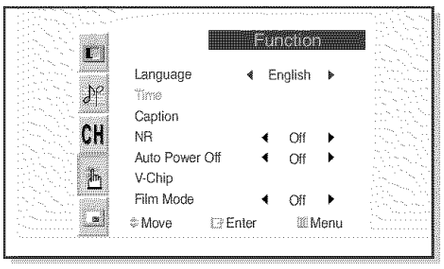
You can set your PDP to automatically turn off after a preset interval.

1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.

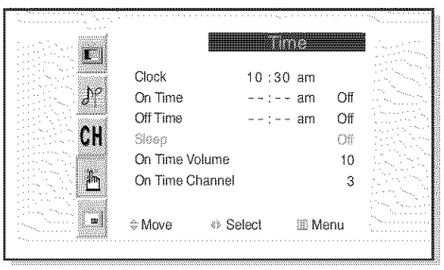
Quick way to access the sleep timer: Just press the "Sleep" button on the remote control.



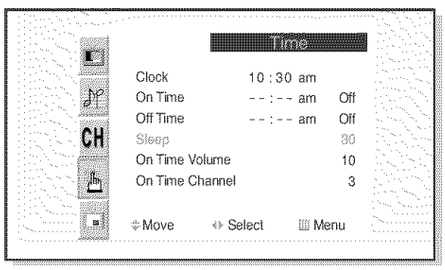
2 Move the joystick up or down to select "Time", then press the joystick to enter.



3 Move the joystick up or down to select "Sleep".



4 Move the joystick left or right to select the time interval for the PDP to stay on. The interval ranges from 10 to 180 minutes.



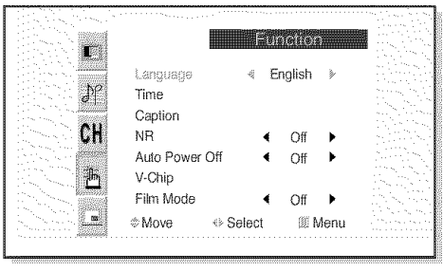
5 Press the Menu button to exit.

Setting the Timers

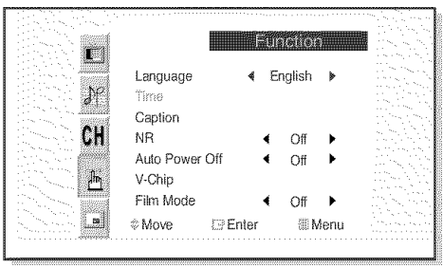
This PDP can be set to turn on or off automatically at specific times that you choose. Before using the timers, you must set the PDP's clock, as described previously.

Setting the On/Off Timer

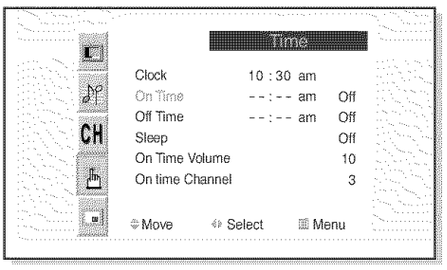
1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



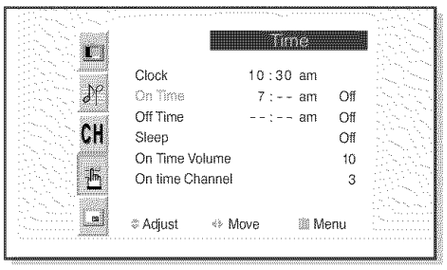
2 Move the joystick up or down to select "Time", then press the joystick to enter.



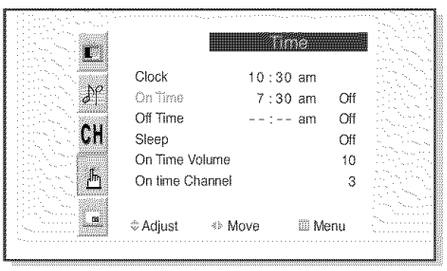
3 Move the joystick up or down to select "On Time".



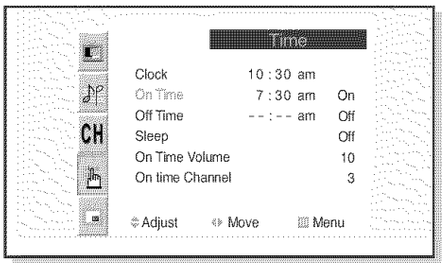
4 Move the joystick left or right to select hour, then move the joystick up or down to select the correct hour.



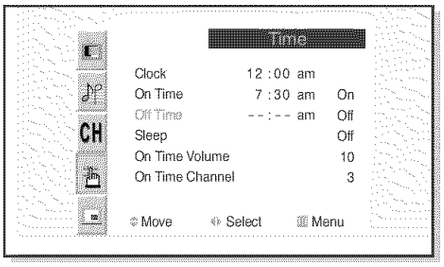
5 Move the joystick left or right to select minute, then move the joystick up or down to select the correct minute.



6 Move the joystick left or right to select "Off" or "On", then move the joystick up down to select "Off" or "On".



7 If you want to set Off Time, move the joystick down to select the "Off Time".
Set the "Off Time" just as you set "On Time".



8 Press the Menu button to exit.

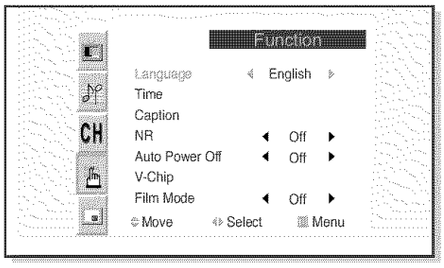
Note

- If you set to On Time or Off Time, the Power Indicator on the Front Panel is changed to Green.

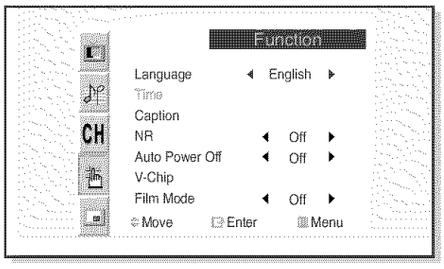
Setting the Preferred Channel and Volume Level

The preferred channel and volume can be set for when the timer automatically turns on the TV.

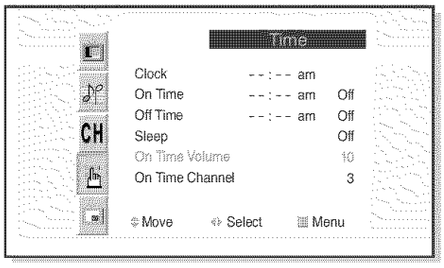
1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



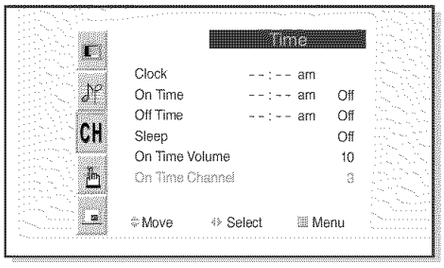
2 Move the joystick up or down to select "Time", then press the joystick to enter.



3 Move the joystick up or down to select "On Time Volume".
Move the joystick left or right to adjust volume level.

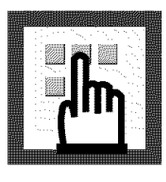


4 Move the joystick up or down to select "On Time Channel".
Move the joystick left or right to select the channel.



BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 77

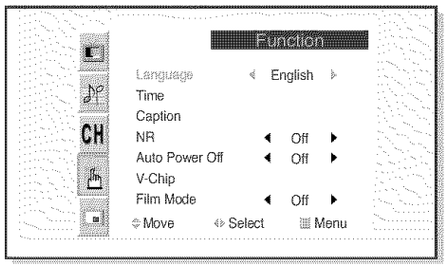
Function Description



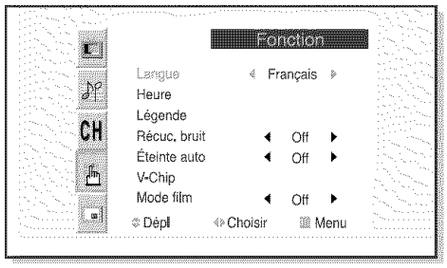
Selecting a Menu Language 78
Viewing Closed Captions 79
Digital Noise Reduction 80
Setting Auto Power Off 81
Using the V-Chip 82
Selecting the Film Mode 88

Selecting a Menu Language

1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



2 Move the joystick left or right to select the appropriate language : English, Français or Español.

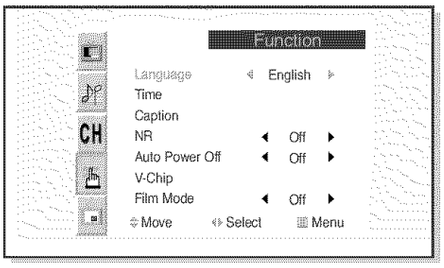


3 Press the Menu button to exit.

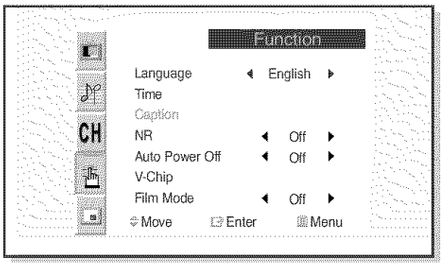
Viewing Closed Captions

Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign-language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed captions. Most pre-recorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packaging: CC .
Note: The Caption feature does not work with DVD or DTV signals.

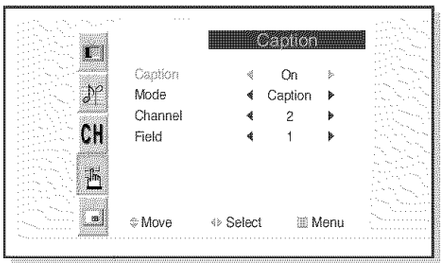
1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



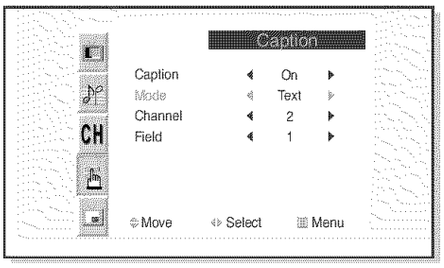
2 Move the joystick up or down to select "Caption", then press the joystick to enter.



3 Move the joystick left or right to turn closed captioning on/off.



4 Move the joystick up or down to select "Mode", then move the joystick left or right to select "Caption" or "Text."



5 Depending on the particular broadcast, it might be necessary to make changes to "Channels" and "Field": Move the joystick up, down, left and right to make the changes. (Follow the same procedure as in steps 3~4 above.)
Press the Menu button to exit.

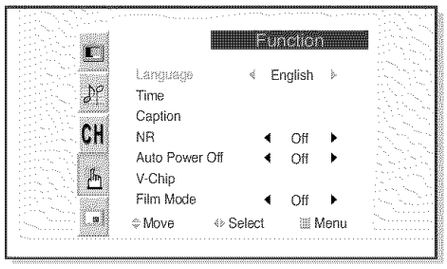
Note

- Different channels and fields display different information: Field 2 carries additional information that supplements the information in Field 1. (For example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.

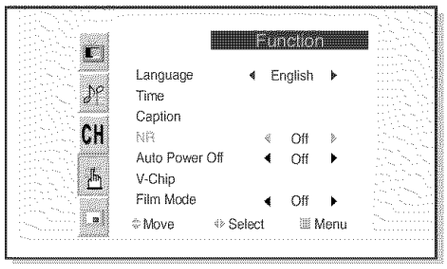
Digital Noise Reduction

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.

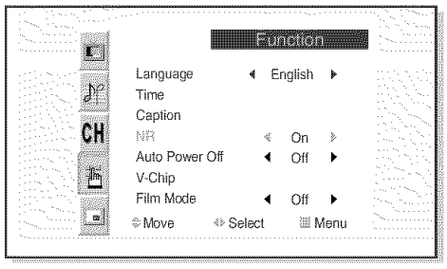
1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



2 Move the joystick up or down to select "NR".



3 Move the joystick left or right to select "On".

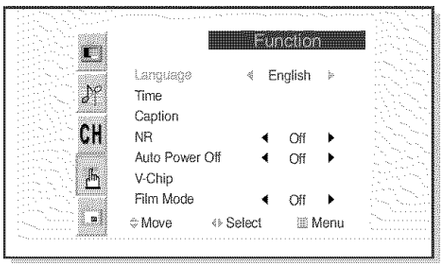


4 Press the Menu button to exit.

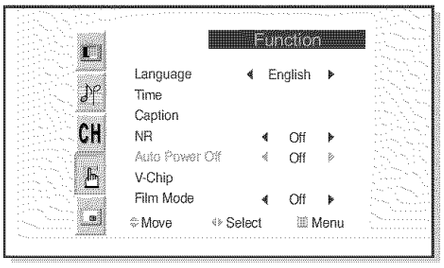
Setting Auto Power Off

The PDP can be set to turn off automatically if no buttons are pressed for 3 hours after the PDP turns on via the On timer.

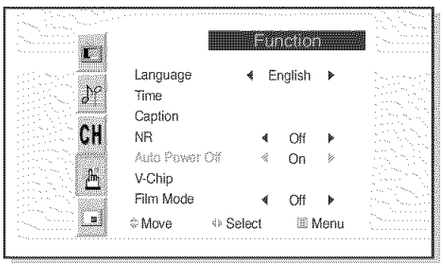
1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



2 Move the joystick up or down to select "Auto Power Off".



3 Move the joystick left or right to select "On".



4 Press the Menu button to exit.

Note

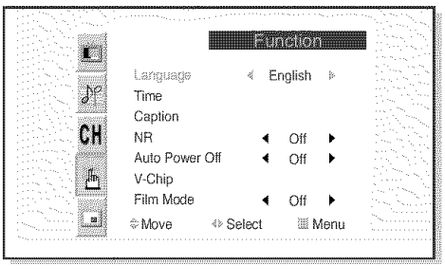
- If the Off timer is set, Auto Power Off will not function.
- The power will be turned off automatically after 15 minutes if the PDP is ON and there is no input signal. (For instance, if you select a channel without a signal while in TV mode or when there is no input signal after selecting an output signal)

Using the V-Chip

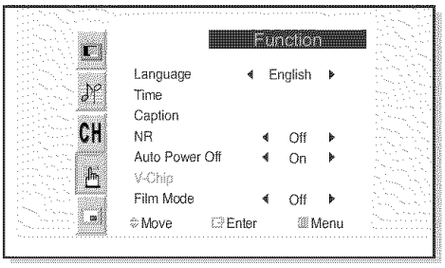
The V-Chip feature automatically locks out programs that are deemed inappropriate for children. The user must enter a PIN (personal ID number) before any of the V-Chip restrictions are set up or changed.
Note : When the V-Chip feature is activated, the PIP and auto channel program features do not function.

Setting Up Your Personal ID Number (PIN)

1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.

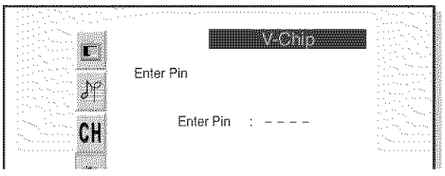


2 Move the joystick up or down to select "V-Chip", then press the joystick to enter.

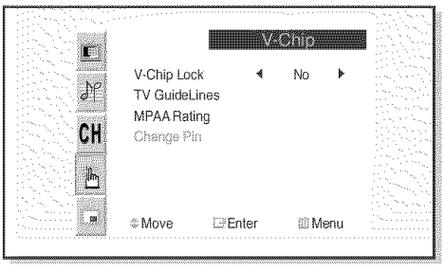


3 The message "Enter Pin" will appear. Enter your 4-digit PIN number.

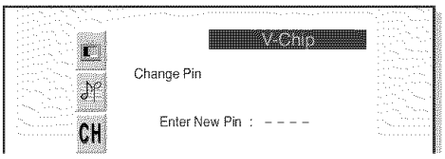
Note: The default PIN number of a new TV set is "0-0-0-0."



4 The "V-Chip" screen will appear. Move the joystick up or down to select "Change Pin," then press the joystick to enter.



5 The Change pin screen will appear. Choose any 4-digits for your PIN and enter them.
As soon as the 4 digits are entered, the "Confirm New Pin" screen appears. Re-enter the same 4 digits. When the Confirm screen disappears, your PIN has been memorized.



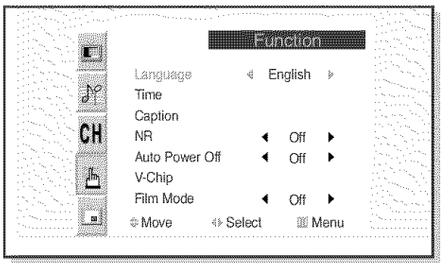
6 Press the Menu button to exit.

Note

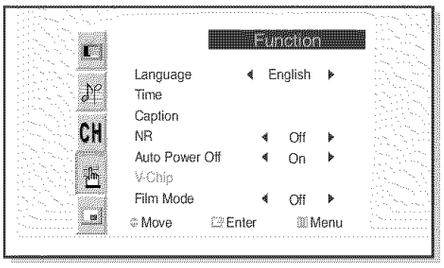
- If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to 0-0-0-0 : Power Off → Mute → 8 → 2 → 4 → Power On.

How to Enable/Disable the V-Chip

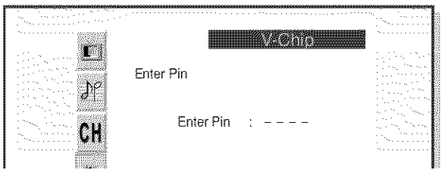
1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



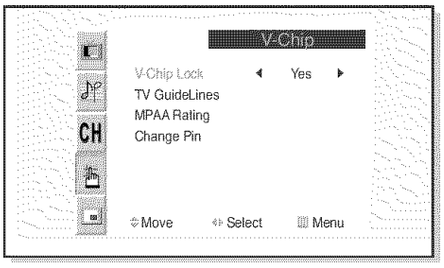
2 Move the joystick up or down to select "V-Chip", then press the joystick to enter.



3 The message "Enter Pin" will appear. Enter your 4-digit PIN number.



4 The "V-Chip" screen will appear.
To enable the V-Chip feature, move the joystick to the right so that the "V-Chip Lock" field is Yes. (Move the joystick to the left or right will alternate between Yes and No.)

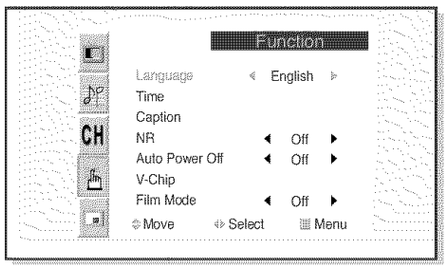


5 Press the Menu button to exit.

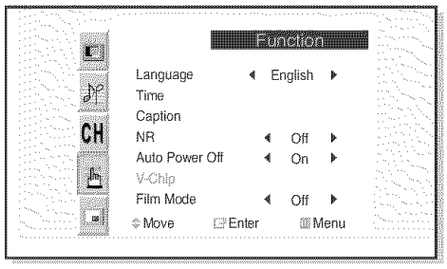
How to Set up Restrictions Using the "TV guidelines"

First, set up a personal identification number (PIN), and enable the V-Chip. (See previous section.)
Parental restrictions can be set up using either of two methods: The TV guidelines or the MPAA rating.

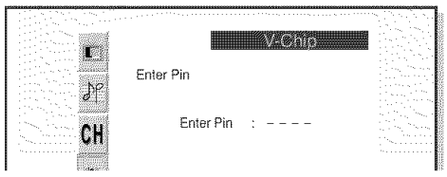
1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



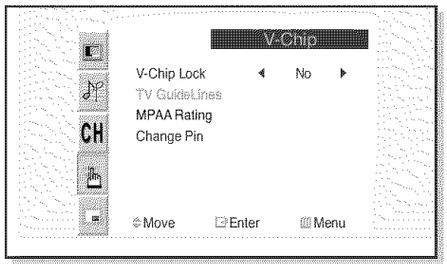
2 Move the joystick up or down to select "V-Chip", then press the joystick to enter.



3 The message "Enter Pin" will appear. Enter your 4-digit PIN number.

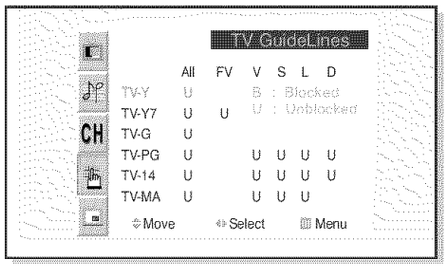


4 The "V-Chip" screen will appear.
Move the joystick up or down to select "TV Guidelines", press the joystick to enter.



5 The "TV guidelines" screen will appear. Move the joystick up or down to select one of the six age-based categories:

TV-Y	Young children
TV-Y7	Children 7 and over
TV-G	General audience
TV-PG	Parental guidance
TV-14	Viewers 14 and over
TV-MA	Mature audience



6 At this point, one of the TV-Ratings is selected.
Move the joystick to the right: Depending on your existing setup, a letter "U" or "B" will start blinking.
(U= Unblocked, B= Blocked)

While the "U" or "B" is blinking, move the joystick up or down to block or unblock the category.
Move the joystick to the right to save the TV guidelines. A TV-Rating will be selected, and no letters will blink.
To select a different TV-Rating, move the joystick up or down and then repeat the process.

Note 1: The TV-Y7, TV-PG, TV-14 and TV-MA have additional options. See the next step to change any of the following sub-ratings:

FV: Fantasy violence
D: Sexually Seggesive Dialog
L: Adult Language
S: Sexual situation
V: Violence

Note 2: The V-Chip will automatically block certain categories that are "more restrictive". For example, if you block "TV-Y" category, then TV-Y7 will automatically be blocked. Similarly, if you block the TV-G category, then all the categories in the "young adult" group will be blocked (TV-G, TV-PG, TV-14 and TV-MA). The sub-ratings (D, L, S, V) work together similarly. (See next section.)

7 How to set the FV, D, L, S and V sub-ratings.
First, select one of these TV-Ratings: TV-Y7, TV-PG, TV-14 or TV-MA (See Step 4, on previous page).
Next, while the TV-Rating is selected, repeatedly move the joystick to the right.
This will cycle through the available sub-ratings (FV,L, S, D or V).
A blinking letter ("U" or "B") will be displayed for each sub-rating. While the "U" or "B" is blinking, move the joystick up or down to change the sub-rating.
Move the joystick to the right to save the TV guidelines. A TV-Rating will be selected and no letters will select. To select a different TV-Rating, move the joystick up or down and then repeat the process.
Note: The V-Chip will automatically block certain categories that are "More restrictive". For example, if you block "L" sub-rating in TV-PG, then the "L" sub-ratings in TV-14 and TV-MA will automatically be blocked.

8 Press the Menu button to clear all the screens. (Or proceed to the next section, and set up additional restrictions based on the MPAA codes).

Note

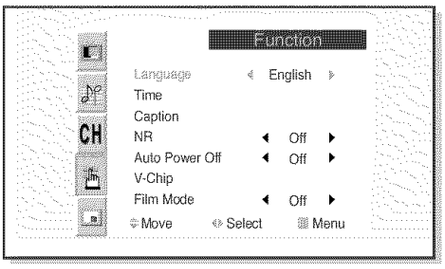
- Note: These categories consist of two separate groups: TV-Y and TV-Y7 (young children through age 7), and TV-G through TV-MA (everybody else). The TV-Y and TV-Y7 categories are colored blue.

  The restrictions for these two groups work independently: If a household includes very young children as well as young adults, the TV guidelines must be set up separately for each age group. (See next step.)

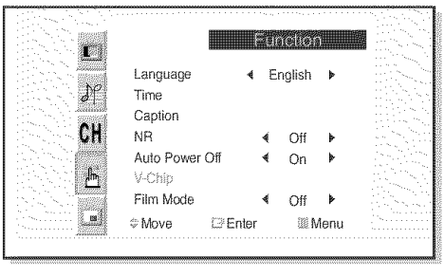
How to Set up Restrictions using the MPAA Ratings: G, PG, PG-13, R, NC-17, X

The MPAA rating system uses the Motion Picture Association of America (MPAA) system, and its main application is for movies. When the V-Chip lock is on, the TV will automatically block any programs that are coded with objectionable ratings (either MPAA or TV-Ratings).

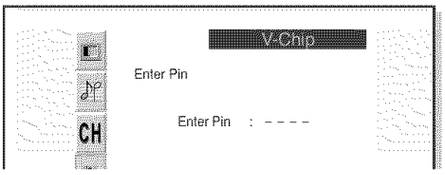
1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



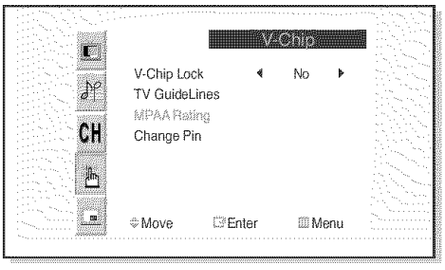
2 Move the joystick up or down to select "V-Chip", then press the joystick to enter.



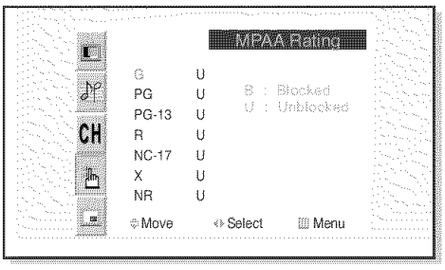
3 The message "Enter Pin" will appear. Enter your 4-digit PIN number.



4 The "V-Chip" screen will appear. Move the joystick down to select "MPAA Rating," press the joystick to enter.



5 The "MPAA rating" screen will appear. MPAA category. Moving the joystick up or down will cycle through the MPAA categories:



G	General audience (no restrictions).
PG	Parental guidance suggested.
PG-13	PG-13 (Parents strongly cautioned).
R	R (Restricted. Children under 17 should be accompanied by an adult).
NC-17	No children under age 17.
X	X (Adults only).
NR	Not rated.

While a particular category is selected, move the joystick to the right to activate it.
A selected letter ("U" or "B") will be displayed. Move the joystick up or down to select "U" or"B".
Move the joystick to the right to save the settings.
Note: The V-Chip will automatically block any category that is "more restrictive." For example, if you block the "PG-13" category, then "R," "NC-17," and "X" will automatically be blocked also.

BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 87

How to Reset the TV after the V-Chip Blocks a Channel ("Emergency Escape")

If the TV is tuned to a restricted channel, the V-Chip will block it. The screen will go blank and the following message will appear: "Excessive rating."

To resume normal viewing, tune to a different channel using the number buttons.
Under certain conditions (depending on the rating of the local TV programs) the V-Chip might lock out all the channels. In this case, use the V-Chip function for an "emergency escape":

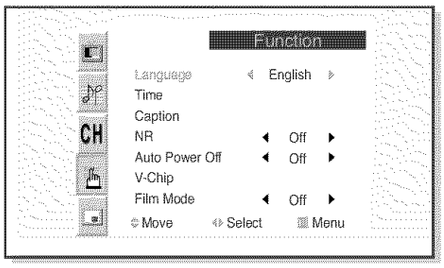
1 Press the Menu button.

2 Move the joystick up or down to select "V-Chip", then press the joystick to enter.

3 Enter your PIN number, and move the joystick to the right to temporarily disable the V-Chip Lock.

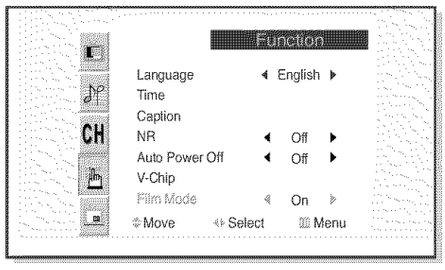
Selecting the Film Mode

1 Press the Menu button. Move the joystick up or down to select "Function", then press the joystick to enter.



2 Move the joystick up or down to select "Film Mode", then move the joystick left or right to select "On" or "Off".

- On: Automatically senses and processes film signals from all sources and adjusts the picture for optimum quality.
- Off: Switches off the Film mode.



3 Press the Menu button to exit.

Note

- Film mode is supported in Video, S-Video, Component 480i.

BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 89

Appendix

Troubleshooting.....90
Care and Maintenance 91
Specifications 92

BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 90

Troubleshooting

Before you call a service technician, please scan this list of problems and possible solutions. It may save you time and money.

Problem	Possible Solution
Poor picture.	Check all wire connections.
Your Remote control does not operate the PDP.	Press the "Mode" button to put your remote control in the "TV" mode. Replace batteries.
The PDP won't turn on.	Check if the power plug is connected.
There is no screen image.	Check to see that both the PDP and the source are plugged in and turned on.
The image is too light or too dark.	Adjust the Brightness or Contrast settings.
The image is too large or too small.	Adjust the Size settings.

BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 91

Care and Maintenance

With proper care, your PDP will give you many years of service. Please follow these guidelines to get the maximum performance from your PDP.

Identifying Problems

- Do not put the PDP near extremely hot, cold, humid or dusty places.
- Do not put the PDP near appliances that create magnetic fields.
- Keep the ventilation openings clear.
- Do not place the PDP on a rough and slanted surface, such as cloth or paper.

Liquids

- Do not place liquids near or on the PDP.

Cabinet

- Never open the cabinet or touch the parts inside.
- Wipe your PDP with a clean, dry cloth. Never use water, cleaning fluids, wax, or chemicals.
- Do not put heavy objects on top of the cabinet.

Temperature

- If your PDP is suddenly moved from a cold to a warm place, unplug the power cord for at least two hours so that moisture that may have formed inside the unit can dry completely.

BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 92

Specifications

Exterior design and product specifications are subject to change without prior notice to improve the performance of this product.

Model		PDP4294LV
Dimensions	Display	1027 (W) X 79 (D) X 630.5 (H) mm ; 40.43 (W) X 3.11 (D) X 24.82(H) inches
	Remote Control	54 (W) X 31.5 (D) X 220 (H) mm ; 2.13 (W) X 1.24 (D) X 8.66 (H) inches
Weight	Display	31 kg ; 68.34 lbs {37.6 kg ; 82.89 lbs (with stand)}
	Remote Control	150g (including batteries) ; 0.33lbs
Voltage		120V~, 60Hz
Power Consumption		370 Watts
Number of Pixels		852(H) x 480(V)
Screen Size		107 Cm/42 inches
ANTENNA input		VHF, UHF (75Ω unbalanced)
VIDEO input		VIDEO S-VIDEO COMPONENT 1 - 480i / 480p / 720p / 1080i COMPONENT 2 - 480i / 480p / 720p / 1080i RGB : D-SUB 15P DVI
AUDIO input		VIDEO / S-VIDEO COMPONENT 1 COMPONENT 2 PC (RGB) DVI
AUDIO output		10W + 10W (8 Ω) Subwoofer (500mv RMS at 1KHz)

BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 93

Memo

Memo

BN68-00711A-00esa_E_4(walldel) 2004.4.30 3:8 PM Page 95

Memo

BN68-00711A-00